### BY ORDER OF THE CHIEF, NATIONAL GUARD BUREAU

MANPOWER STANDARD 4401TC

1 SEPTEMBER 2004



Manpower Standard

# COMBAT READINESS TRAINING CENTER CIVIL ENGINEERING SUPPORT

#### COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This Air National Guard Manpower Standard (ANGMS) quantifies the manpower required to accomplish the tasks described in the process oriented description (POD) for varying levels of workload in the Combat Readiness Training Center (CRTC) Civil Engineering Support. This ANGMS applies to the Combat Readiness Training Center, Civil Engineering mission only, at the Alpena, Gulfport, Savannah and Volk Field CRTCs. This standard applies to peacetime operations only. The Air National Guard (ANG) is the authority for the approval and publication of ANG Manpower Standards. Air Force (AF) and ANG directives contain policy and procedural guidance for the operation of the Combat Readiness Training Center function. This standard was developed in accordance with AF Instruction (AFI) 38-201, Determining Manpower Requirements, and AF Manual (AFMAN) 38-208, Volume 1, Air Force Management Engineering Program (MEP) - Processes, and AFMAN 38-208, Volume 2, Air Force Management Engineering Program (MEP) - Quantification Tools. Send comments and suggested improvements on AF IMT 847, Recommendation for Change of Publication, through channels, to ANG, Management Engineering Branch (ANG/XPME/Operating Location TN [OLTN]), 106 Briscoe Drive, McGhee Tyson ANG Base, TN 37777-6283.

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#### 1. STANDARD DATA.

- 1.1. Approval Date: 1 September 2004.
- 1.2. Man-hour Data Source: Operational Audit method (historical record and technical estimate techniques).
- 1.3. Standard Man-hour Equation: Y = 157.9 + 1.035.
- 1.4. Workload Factor:
  - 1.4.1. Title: Total Facilities Square Footage (In Thousands).
  - 1.4.2. Definition: The average monthly square footage of CRTC facilities.
  - 1.4.3. Source: USAF Program Document (PD), Volume II maintained by ANG/XPPI.
- 1.5. Liquid Fuels: Y = 1 (Constant Manpower).
- 1.6. Power Production: Y = 2 (Constant Manpower).
- 1.7. Points of Contact.
  - 1.7.1. Functional: Mr. Pat Welch, ANG/C4R
  - 1.7.2. Manpower: Major Brian Cotton, ANG/XPME/OLTN

#### 2. APPLICATION INSTRUCTIONS.

- 2.1. Step 1. Man-hour Equation. Apply the man-hour equation in Paragraph 1.3., to determine required man-hours.
- 2.2. Step 2. Man-hour Availability Factor (MAF). Divide the resulting man-hours by the appropriate MAF times the overload factor.
- 2.3. Step 3. Upper and Lower Extrapolation Limits:
  - 2.3.1.  $Y_U = 1447.21$ .
  - 2.3.2.  $Y_L = 867.76$ .
- 2.4. Step 4. Air Force Specialty Codes (AFSC) Requirement. Use the Manpower Table Attachment 3 to determine required AFSCs.

**3. STATEMENT OF CONDITIONS.** The conditions listed below had no affect on the development of this standard: minimum response rates, minimum manpower levels, standardized crew complements, safety considerations, aircraft turn-around time, length of waiting periods, levels of backlog and hours of operation.

DANIEL JAMES III, Lieutenant General, USAF Director, Air National Guard

#### Attachment 1

#### GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 38-201, Determining Manpower Requirements

AFMAN) 38-208, Volume 1, Air Force Management Engineering Program (MEP)-Processes

AFMAN 38-208, Volume 2, Air Force Management Engineering Program (MEP) - Quantification Tools

Abbreviations and Acronyms

**ABSS** - Automated Business Service System

**ACES** - Automated Civil Engineer System

AF - Air Force

**AFOSHA** - Air Force Occupational Safety and Health Administration

AGR - Active Guard/Reserve

ANG - Air National Guard

**ANGMS** - Air National Guard Manpower Standard

**AUTO CADD** - Computer Aided-Drafting and Design

**BAK** - Barrier Arresting Kit

**BCE** - Base Civil Engineering

**CEV** - Environmental Management

**CFC** - Chlorofluorocarbon

**CRTC** - Combat Readiness Training Center

**CWK** - Recurring Maintenance Completion

**CWON** - Collection Work Order Number

**DD** - Department of Defense

**DSN** - Defense Switched Network

**DRMO** - Defense Reutilization and Marketing Office

**EAID** - Equipment Authorization Inventory Data

**EBS** - Environmental Baseline Survey

**ECAMP** - Environmental Compliance Assessment and Management Program

**ECS** - Environmental Close Out Survey

**EEIC** - Element of Expense Identification Code

**EMIS** - Environmental Management Information System

**EPC** - Environmental Protection Committee

**EPCRA** - Emergency Planning and Community Right-to-Know Act

**FCA** - Fund Cite Authorization

FMB - Financial Management Board

**FOMA** - Facility Operations and Maintenance Agreements

FRP - Facility Requirements Program

**FWG** - Financial Working Group

FY - Fiscal Year

**GIS** - Geographical Information System

**HAF** - Headquarters Air Force

**HAZMART** - Hazardous Materials Pharmacy

**HM** - Hazardous Material

**HMMT** - Hazardous Material Management Team

IAW - In Accordance With

**IEMS** - Integrated Engineering Management Systems

**IEX** - Issue Exception

**IRP** - Installation Restoration Program

**JA** - Judge Advocate

JOC - Job Order Contract

**LUC** - Labor Utilization Code

MAAS - Mobile Aircraft Arresting System

MAF - Man-hour Availability Factor

MC - Minor Construction

**MCP** - Military Construction Program

**MEP** - Management Engineering Program

**MOGAS** - Motor Gasoline

NFPA - National Fire Protection Association

NGB - National Guard Bureau

**NOV** - Notice of Violation

NPDES - National Pollutant Discharge Elimination System

**ODS** - Ozone Depleting Substance

**OF** - Optional Form

**OSHA** - Occupational Safety and Health Administration

PA - Public Affairs

PCB - Polychlorinated Biphenyl

POC - Point of Contact

POL - Petroleum, Oils, And Lubricants

Prime BEEF - Priority Improved Management Effort Base Engineer Emergency Force

**RA** - Resource Advisor

**RCRA** - Resource Conservation and Recovery Act

**RMP** - Recurring Maintenance Program

SABER - Simplified Acquisition and Base Engineering Requirements

**SOW** - Statement of Work

**SRM** - Sustainment, Restoration and Modernization

**TO** - Technical Order

**TCTO** - Time Compliance Technical Order

TOC -Task Order Contractor

**UTA** - Unit Training Assembly

**WCD** - Work Center Description

WLF - Workload factor

#### **Terms**

**Air National Guard Manpower Standard (ANGMS)**. A numbered, specialized publication that quantifies manpower requirements for a work center. Also includes approved variances. See AFI 38-201.

**Man-hour**. A unit of measuring work. It is equivalent to one person working at a normal pace for 60 minutes, two people working at a normal pace for 30 minutes, or a similar combination of people working at a normal pace for a period to time equal to 60 minutes.

**Manpower Standard**. The basic tool used to determine the minimum level of manpower required to support a function. It is a quantitative expression that represents a work center's manhour requirements in response to varying levels of workload.

**Process Oriented Description**. A format that shows work center responsibilities structured for easy measurement of work categories, tasks and subtasks.

**Historical Record.** Documented past work performance of the work center.

**Operational Audit.** A work measurement method consisting of one or a combination of the following techniques: good operator timing, historical records, technical estimate, standard time, and directed requirement.

Staffing Pattern. Constant manpower.

**Technical Estimate.** A determination of the standard hours required for a given task, based on an estimate by individuals who are technically and professionally competent to judge the time required.

**Work Center Description.** A format that shows work center responsibilities structured for easy measurement of work categories, tasks and subtasks.

**Variance.** A condition that exists that either adds to or subtracts from the core workload, or impacts the way the work is performed. A variance can be the result of environmental, mission or technological differences, and can be either positive or negative.

## **Attachment 2**

# PROCESS ORIENTED DESCRIPTION COMBAT READINESS TRAINING CENTER (CRTC) AIRFIELD OPERATIONS

**Table A2.1. Listing of Functional Process.** 

1.	ENVIRONMENTAL ENGINEERING.
1.1.	PERFORMS ENVIRONMENTAL PLANNING.
1.1.1.	PREPARES BUDGET INFORMATION AND TRACKS FUNDING FOR INSTALLATION ENVIRONMENTAL REQUIREMENTS. Manages base environmental budget. Attends Financial Working Group/Financial Management Board (FWG/FMB) meeting to coordinate and reconcile the environmental budget. Tracks and certifies funding relating to environmental expenditures. Acts as Contracting Officer representative for environmental service contract. Requests payment for environmental fee, permit, and fine as required. Prepares and submits purchase request for supplies and equipment. Receives and reviews financial report from Supply, verifies expenditure, and validates request. Prepares and submits project/program information and budget requirements through the A-106 program. Coordinates on Department of Defense (DD) Form 1391, FY Military Construction Project Data, prepared by Base Civil Engineer (BCE). Tracks the status of project/requirement in the A-106 program from submittal through funding and completion. Records and updates change to project as it occurs. Prepares and submits budget estimate for hazardous waste analysis and/or disposal to ANG, Environmental Management (ANG/CEV) as required. Reviews and compiles budget estimate. Receives input on environmental requirement from base organization and incorporates in a funding plan for the environmental program.
1.1.2.	MANAGES NOTICE OF VIOLATION (NOV) OR OTHER ENFORCEMENT ACTION BY REGULATORY AGENCY FOR THE INSTALLATION
1.1.2.1.	ACTS AS AGENT OF RECEIPT AND COORDINATES NOV ACTION. Coordinates receipt and response to NOV with Base Judge Advocate (JA), Adjutant General JA, National Guard Bureau (NGB)/JA, ANG/CEV, Base Commander, and other office as required.
1.1.2.2.	RESEARCHES AND RECOMMENDS CORRECTIVE ACTION FOR NOV.
1.1.2.3.	MONITORS CORRECTIVE ACTION FOR NOV AND UPDATES ANG/CEV STATUS REPORT AS REQUIRED.
1.1.2.4.	PREPARES AND PRESENTS INITIAL PROPOSAL TO REGULATORY AGENCY.

1.1.2.5.	NEGOTIATES WITH REGULATORY AGENCY FOR RESOLUTION OF NOV.
1.1.3.	MAINTAINS ENVIRONMENTAL COORDINATOR TECHNICAL REFERENCE LIBRARY. Maintains and updates professional publications.
1.1.4.	SERVES AS EXECUTIVE SECRETARY FOR THE ENVIRONMENTAL PROTECTION COMMITTEE (EPC).
1.1.4.1.	CONTACTS EPC MEMBER. Contacts EPC member to determine if they have items for the agenda.
1.1.4.2.	REVIEWS CURRENT ENVIRONMENTAL PROGRAM STATUS. Reviews the current status of environmental program to determine what item should be brought before the EPC.
1.1.4.3.	PREPARES AND PUBLISHES THE EPC MEETING AGENDA.
1.1.4.4.	PREPARES BRIEFING AND BRIEFS THE EPC.
1.1.4.5.	PROVIDES AWARENESS TRAINING FOR EPC MEMBER. Provides awareness. Familiarizes member with environmental regulations affecting the base and informs member of their responsibilities and duties.
1.1.4.6.	PREPARES AND PUBLISHES MINUTES OF EPC MEETING.
1.1.4.7.	MONITORS OPEN ACTION ITEM/SPECIAL INTEREST ITEM RAISED BY THE EPC.
1.1.4.8.	PROVIDES TECHNICAL GUIDANCE TO WORKING SUBCOMMITTEE AS REQUIRED.
1.1.5.	MANAGES INSTALLATION'S ENVIRONMENTAL COMPLIANCE ASSESSMENT AND MANAGEMENT PROGRAM (ECAMP).
1.1.5.1.	PROVIDES SUPPORT FOR THE EXTERNAL ECAMP AUDIT. Provides information and arranges logistic support for the external ECAMP audit. Coordinates with base personnel and completes pre-survey questionnaire. Acts as escort and information source during the external ECAMP audit. Recommends corrective action and office of primary responsibility for ECAMP finding to EPC. Reviews preliminary report and prepares comments for EPC review. Prepares action plan on ECAMP deficiencies with input from office of primary responsibility and forwards to ANG/CEV through the Adjutant General. Monitors corrective action for external audit finding. Prepares and forwards quarterly status report on open ECAMP findings to ANG/CEV.
1.1.5.2.	MANAGES INTERNAL ECAMP AUDIT. Implements internal ECAMP audit. Organizes and recommends composition of the internal audit team to EPC.

	Researches regulation and briefs internal audit team. Acts as team chief during internal ECAMP inspection, to include inspecting document, inspecting work area, and resolving simple discrepancy. Develops a report of findings to brief the EPC. Prepares action plan for unresolved internal ECAMP findings. Monitors corrective action for unresolved findings.
1.1.6.	MANAGES INSTALLATION'S AIR QUALITY PROGRAM.
1.1.6.1.	COMPILES AND REVIEWS AIR EMISSION DATA. Compiles and reviews data from off-base agency, maintenance/operations log, test log from air pollutant source, and air sampling data.
1.1.6.2.	INSPECTS/EVALUATES AIR POLLUTANT SOURCE FOR ENVIRONMENTAL COMPLIANCE. Inspects/evaluates volatile organic compound source, fuel burning source, construction site for air emission compliance, and other air pollution source for compliance with environmental regulation.
1.1.6.3.	RESEARCHES/RECOMMENDS OPERATING PROCEDURAL CHANGE TO CORRECT AIR POLLUTION CONTROL PROBLEM. Recommends change in operating procedures to include state mandated program such as travel reduction coordinators.
1.1.6.4.	RECOMMENDS EQUIPMENT TO CORRECT AIR POLLUTION CONTROL PROBLEM. Researches best/reasonable available control technology. Prepares Statement of Work/Specification (SOW/Spec) for purchase of needed pollutant control equipment.
1.1.6.5.	RECOMMENDS FACILITY REQUIREMENT TO CORRECT AIR POLLUTION CONTROL PROBLEM. Prepares/submits AF IMT 332, <i>Base Civil Engineer Work Request</i> , for facility requirement. Attends criteria review conference. Reviews type "A" and "B" designs submitted for environmental compliance. Monitors construction for compliance with contract document.
1.1.6.6.	COORDINATES WITH REPRESENTATIVE OF OFF-/ON-BASE ORGANIZATION ON AIR POLLUTION ISSUE. Provides technical assistance to base personnel on air pollution claim, inquiry, and/or issue for public announcement. Provides escort assistance to representatives of an environmental agency or special team during base visit/inspection. Attends public meeting. Provides technical input as required at public meeting. Reports variation from permit standards to regulatory agency.
1.1.6.7.	PREPARES AND SUBMITS REPORT. Prepares and submits Air Pollution report to environmental agency.
1.1.6.8.	APPLIES FOR AND MAINTAINS PERMIT. Applies for and maintains Air

	Pollution Control permit.
1.1.6.9.	MAINTAINS AND UPDATES AIR QUALITY EPISODE PLAN.
1.1.7.	MANAGES INSTALLATION'S SURFACE AND GROUNDWATER QUALITY PROGRAM FOR ENVIRONMENTAL COMPLIANCE.
1.1.7.1.	COMPILES AND REVIEWS SURFACE AND GROUND WATER DATA. Compiles and reviews water quality data from off-base. Compiles and reviews maintenance, operations, or test log from potential water pollution source. Compiles and reviews water quality sampling data.
1.1.7.2.	INSPECTS/EVALUATES WATER POLLUTION SOURCE AND CONTROL SYSTEM. Inspects/evaluates wastewater treatment facility conveyance, collection system, and storage facility. Inspects/evaluates storm water pollution source, control system, and associated structure. Inspects/evaluates construction site for effective erosion and sediment control and storm water management. Inspects/evaluates other potential water pollution source for environmental compliance.
1.1.7.3.	RECOMMENDS OPERATING PROCEDURAL CHANGE TO CORRECT WATER POLLUTION PROBLEM. Recommends change in operating procedures to include state-mandated program such as chloride minimization
1.1.7.4.	RECOMMENDS EQUIPMENT TO CORRECT WATER POLLUTION PROBLEM. Researches current available technology. Prepares SOW/Spec for purchase of needed pollutant control equipment.
1.1.7.5.	RECOMMENDS FACILITY REQUIREMENT TO CORRECT WATER POLLUTION PROBLEM. Prepares/submits AF IMT 332 for facility requirement. Attends criteria review conference. Reviews type "A" and "B" designs submitted for environmental compliance. Monitors construction for compliance with contract document.
1.1.7.6.	COORDINATES WITH REPRESENTATIVE OF OFF-/ON-BASE ORGANIZATION ON WATER POLLUTION ISSUE. Provides technical assistance to base personnel on water pollution claim, inquiry, and/or issue for public announcement. Provides escort assistance to representatives of environmental agency or special team during base visit/inspection. Provides technical input as required at public meeting. Reports variation from permit standards to regulatory agency.
1.1.7.7.	PREPARES/SUBMITS REPORT. Prepares and submits report for water pollution to environmental agency.
1.1.7.8.	APPLIES FOR AND MAINTAINS WATER DISCHARGE PERMIT. Applies for and maintains National Pollutant Discharge Elimination System (NPDES)

	Permit, State Pollutant Discharge Elimination System Permit, and storm water permit.
1.1.8.	COORDINATES ON THE INSTALLATION'S DRINKING WATER QUALITY PROGRAM WITH BIOENVIRONMENTAL AND BCE.
1.1.8.1.	COMPILES AND REVIEWS DRINKING WATER QUALITY DATA. Compiles and reviews operations and maintenance log and drinking water sampling and analysis data.
1.1.8.2.	COORDINATES CORRECTIVE ACTION BETWEEN BIOENVIRONMENTAL ENGINEER AND THE BCE.
1.1.8.3.	COORDINATES WITH REPRESENTATIVE. Coordinates with representative of off-/on-base organization to answer claim, inquiry, and/or complaint.
1.1.9.	MANAGES THE INSTALLATION'S HAZARDOUS WASTE PROGRAM.
1.1.9.1.	UPDATES HAZARDOUS WASTE MANAGEMENT PLAN TO COMPLY WITH CURRENT REGULATIONS.
1.1.9.2.	COMPILES AND REVIEWS HAZARDOUS WASTE DATA. Reviews and verifies report from Supply for accuracy of hazardous waste turn-ins. Characterizes waste stream data by identifying, describing, and quantifying hazardous waste. Compiles and reviews hazardous waste generation data from manifest, accumulation point log, inventory, and lab analysis.
1.1.9.3.	UPDATES AND IMPLEMENTS A HAZARDOUS WASTE TRAINING PROGRAM. Acquires and organizes material for training. Conducts Hazardous Waste Training class. Documents training, to include course date, attendee, position title, and course title.
1.1.9.4.	INSPECTS HAZARDOUS WASTE HANDLING PROCEDURE, FACILITY, AND RECORDS. Inspects shop identified as generating hazardous waste for Resource Conservation Recovery Act (RCRA) compliance. Inspects hazardous waste initial (satellite) accumulation point, accumulation site (central accumulation point), and transporter. Verifies permitted hazardous waste storage treatment and disposal facility is operating in compliance with applicable environmental regulations.
1.1.9.5.	MAINTAINS PERMIT AND RECORD. Updates Part "A" Permit to reflect hazardous waste generated on the installation. Assists in preparation of hazardous waste turn-in document and maintains installation turn-in documentation. Verifies accuracy and maintains copy of manifest and land ban notification. Maintains installation's inspection record.
1.1.9.6.	PREPARES AND SUBMITS REPORT. Prepares/submits biennial hazardous

	waste report to the proper environmental regulatory agency. Prepares/submits exception report to the proper environmental regulatory agency. Prepares/submits other hazardous waste report to the proper environmental regulatory agency and/or ANG/CEV.
1.1.9.7.	PROVIDES TECHNICAL ASSISTANCE. Provides technical assistance to installation personnel on hazardous waste management issue.
1.1.9.8.	RECOMMENDS CORRECTIVE ACTION FOR HAZARDOUS WASTE MANAGEMENT PROBLEM.
1.1.9.8.1.	RECOMMENDS CHANGE IN HAZARDOUS WASTE HANDLING PROCEDURE. Recommends change in hazardous waste handling procedures needed to comply with regulations and/or protect worker and/or the environment.
1.1.9.8.2.	RECOMMENDS EQUIPMENT TO CORRECT HAZARDOUS WASTE MANAGEMENT PROBLEM. Researches current available technology. Prepares SOW/Spec for purchase of needed pollutant control equipment. Recommends facility requirement to correct waste management problem. Prepares/submits AF IMT 332 for facility requirement. Attends Criteria Review Conference. Reviews type "A" and "B" designs submitted for environmental compliance. Monitors construction for compliance with contract document.
1.1.9.9.	COORDINATES RESPONSIBILITIES WITH REPRESENTATIVES OF OFF-/ON-BASE ORGANIZATION ON HAZARDOUS WASTE ISSUE. Provides escort assistance to representatives of an environmental regulatory agency or special team during base visit/inspection. Provides assistance to base Public Affairs (PA) office concerning public announcement on hazardous waste claim, inquiry, or issue. Coordinates information and legal issue on third party site with ANG/CEV, Base JA, Adjutant General JA, and NGB/JA. Attends public meeting on hazardous waste issues as a base representative. Coordinates with Defense Reutilization and Marketing Office (DRMO) or contractor for turn-in and pickup of hazardous waste or hazardous material.
1.1.10.	MANAGES THE INSTALLATION'S POLYCHLORINATED BIPHENYL (PCB) PROGRAM.
1.1.10.1.	COMPILES AND REVIEWS PCB DATA. Compiles and reviews lab test data for oil filled transformer. Compiles and reviews quarterly inspection data for PCB transformers.
1.1.10.2.	ENSURES PROPER EQUIPMENT LABELING. Inspects PCB containing equipment for proper labeling and notifies emergency response agency of PCB location.
1.1.10.3.	RECOMMENDS FACILITY REQUIREMENT TO CORRECT PCB MANAGEMENT PROBLEM. Prepares/submits AF IMT 332 for facility

	requirement. Attends Criteria Review Conference. Reviews type "A" and "B" designs submitted for environmental compliance. Monitors construction for compliance with contract document.
1.1.10.4.	PREPARES AND SUBMITS REQUIRED PCB REPORT TO THE APPROPRIATE ENVIRONMENTAL AGENCY AND ANG/CEV. Prepares and maintains annual PCB report.
1.1.10.5.	MONITORS PCB LEAK TO ASSURE CLEANUP IS MADE WITHIN 48 HOURS.
1.1.11.	MANAGES STORAGE TANK PROGRAM.
1.1.11.1.	COMPILES AND REVIEWS STORAGE TANK DATA. Compiles and reviews information to include location, historical releases, previous owners, tenants, tank closure reports, site assessments, etc. Compiles and reviews tank tightness testing data and operation and maintenance log.
1.1.11.2.	INSPECTS AND EVALUATES STORAGE TANK SYSTEM. Inspects and evaluates spill and over-fill system, tank tightness testing procedures, leak detection monitoring system, and tank inventory control record.
1.1.11.3.	APPLIES FOR AND MAINTAINS STORAGE TANK PERMIT. Verifies contract specifications requiring the contractor to obtain license for storage tank installation or removal. Applies for and maintains registration/permit for operation of storage tank.
1.1.11.4.	RECOMMENDS OPERATING PROCEDURAL CHANGE TO CORRECT TANK STORAGE PROBLEM. Recommends change in operating procedures to achieve environmental compliance to include state-mandated program.
1.1.11.5.	RECOMMENDS EQUIPMENT TO UPGRADE AND MAINTAIN STORAGE TANK. Researches current available technology. Prepares SOW/Specs for purchase of needed pollutant control equipment.
1.1.11.6.	UPDATES AND MAINTAINS SCHEDULE FOR STORAGE TANK REPLACEMENT.
1.1.11.7.	RECOMMENDS FACILITY REQUIREMENT TO UPGRADE/MAINTAIN STORAGE TANK. Prepares/submits AF IMT 332 for facility requirement. Attends Criteria Review Conference. Reviews type "A" and "B" designs submitted for environmental compliance. Monitors construction for compliance with contract document.

1.1.11.8.	SUBMITS STORAGE TANK REPORT AND MAINTAINS RECORD. Updates and submits storage tank inventory to regulator and ANG/CEV. Prepares and submits necessary report for leaking tank with regulator and ANG/CEV and closure plan for tank with regulator and ANG/CEV. Maintains applicable training
	record for storage tank operator, installer, and tester.
1.1.11.9.	COORDINATES WITH REPRESENTATIVE OF OFF-/ON-BASE ORGANIZATION ON THE STORAGE TANK PROGRAM. Provides escort assistance to representatives of an environmental regulatory agency or special team during a base visit/inspection. Provides technical assistance to base personnel on storage tank claim, inquiry, and/or issue for public announcement.
1.1.12.	PARTICIPATES/ASSISTS IN CONTINGENCY RESPONSE FOR SPILL OR RELEASE.
1.1.12.1.	ASSISTS IN PLANNING AND EXECUTING EMERGENCY RESPONSE TRAINING.
1.1.12.2.	ASSISTS IN PLANNING AND EXECUTING EMERGENCY RESPONSE EXERCISE.
1.1.12.3.	INSPECTS SPILL KIT AND SPILL TRAILER FOR APPROPRIATE SPILL CONTAINMENT EQUIPMENT AND SUPPLIES.
1.1.12.4.	PROVIDES COORDINATION. Coordinates with regulatory agency, community right-to-know group, and/or emergency response agency, to include Tier III.
1.1.12.5.	PROVIDES TECHNICAL ASSISTANCE IN ACTUAL EMERGENCY RESPONSE TO A SPILL OR RELEASE. Provides technical assistance to determine level of contamination, amount of pollutant, and level of risk. Provides technical assistance to determine proper remediation technique. Arranges for disposal of spill residue. Manages restoration of a contaminated site to include preparing SOW and selecting a contractor to perform the required work. Negotiates with regulatory agency for closure at spill incident. Updates spill response plan. Informs appropriate regulatory agency and ANG/CEV of spill or release by phone and follows-up with written report. Provides technical advice to emergency coordinator.
1.1.12.6.	IMPLEMENTS AND MANAGES RAPID RESPONSE PROGRAM. Notifies regulatory authorities and ANG/CEV of emergency. Submits emergency funding request. Obtains special contract services.
1.1.13.	MONITORS INSTALLATION'S SOLID WASTE PROGRAM.
1.1.13.1.	REVIEWS SOW. Reviews SOW for solid waste disposal contract to ensure it contains provisions requiring the contractor to comply with environmental

	regulations.
1.1.13.2.	INSPECTS DUMPSTER. Inspects dumpster on base to ensure there is not a pattern of disposal of prohibited items in dumpster.
1.1.14.	MONITORS THE INSTALLATION'S PESTICIDE PROGRAM.
1.1.14.1.	INSPECTS PESTICIDE SHOP RECORD. Inspects pesticide shop record to ensure annual plan is filed with ANG/CEV.
1.1.14.2.	INSPECTS PESTICIDE DAILY USE RECORD. Inspects pesticide daily use record for completeness and accuracy.
1.1.14.3.	INSPECTS PESTICIDE FACILITY. Inspects pesticide facility for proper storage and labeling of pesticide.
1.1.14.4.	REVIEWS INVENTORY OF PESTICIDE. Reviews inventory of pesticide to verify banned item is not used.
1.1.14.5.	VERIFIES PESTICIDE APPLICATOR IS PROPERLY TRAINED, CERTIFIED, AND MEDICALLY EVALUATED BY PERIODIC PHYSICALS.
1.1.14.6.	REVIEWS PEST CONTROL CONTRACT. Reviews pest control contract to verify it contains provisions for compliance with environmental regulations.
1.1.14.7.	RESEARCHES/RECOMMENDS UPGRADE/REPLACEMENT OF INADEQUATE PESTICIDE FACILITY TO EPC.
1.1.15.	MONITORS THE INSTALLATION'S ASBESTOS PROGRAM.
1.1.15.1.	RESEARCHES AS-BUILT DATA FOR LOCATION OF ASBESTOS CONTAINING MATERIAL.
1.1.15.2.	COORDINATES WITH BIOENVIRONMENTAL ENGINEERING FOR SAMPLING AND ANALYSIS OF SAMPLES FOR ASBESTOS.
1.1.15.3.	COORDINATES WITH BCE FOR REMOVAL/SURVEY OF ASBESTOS.
1.1.15.4.	REVIEWS SPECIFICATION PREPARED BY BCE FOR THE REMOVAL OF ASBESTOS.
1.1.15.5.	VERIFIES INSTALLATION PERSONNEL WORKING WITH ASBESTOS ARE TRAINED AND CERTIFIED.
1.1.15.6.	INSPECTS FOR PROPER PACKAGING, LABELING, AND DISPOSAL OF ASBESTOS.

1.1.15.7.	ASSISTS IN UPDATING AND MAINTAINING BCE PREPARED ASBESTOS MANAGEMENT AND OPERATIONS PLAN.
1.1.16.	REVIEWS ACTION FOR POTENTIAL ENVIRONMENTAL IMPACT ON THE INSTALLATION.
1.1.16.1.	REVIEWS SUPPORT AGREEMENT. Reviews support agreement to ensure it includes delineation of responsibility for environmental work.
1.1.16.2.	REVIEWS PROJECT PLANS/ENGINEERING DRAWINGS. Reviews real property management project/engineering drawings and military construction project plans/engineering drawings for environmental compliance, installation's long-range plan, base management plan, and cooperative agreement.
1.1.17.	DIRECTS THE INSTALLATION'S ENVIRONMENTAL IMPACT ANALYSIS PROCESS FOR COMPLIANCE WITH NATIONAL ENVIRONMENTAL POLICY ACT.
1.1.17.1.	REVIEWS AND COORDINATES ON WORK REQUEST. Reviews and coordinates on work request to determine if an environmental analysis of the action is required or if it qualifies for a categorical exclusion.
1.1.17.2.	REVIEWS PROPOSAL FOR LAND USE CHANGE, ACQUISITION, OR DISPOSAL OF LAND, BUILDING, OR FACILITY.
1.1.17.3.	EVALUATES AF IMT 813, REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS.
1.1.17.4.	PREPARES PRELIMINARY ENVIRONMENTAL SURVEY.
1.1.17.5.	COMPILES DATA ON EXISTING CONDITION FOR ENVIRONMENTAL ASSESSMENT.
1.1.17.6.	PREPARES ENVIRONMENTAL ASSESSMENT AND FORWARDS TO THE PROPER AGENCY FOR REVIEW.
1.1.17.7.	PREPARES A "FINDING OF NO SIGNIFICANT IMPACT" STATEMENT FOR PUBLIC RELEASE AND COORDINATES THE RELEASE WITH ANG/PUBLIC AFFAIRS (PA) AND BASE PA OFFICE.
1.1.17.8.	REVIEWS ENVIRONMENTAL ASSESSMENT PREPARED BY ANG/CEV OR CONTRACTOR.
1.1.17.9.	REVIEWS IMPACT STATEMENT.
1.1.17.10.	COORDINATES PUBLIC HEARING, TECHNICAL REVIEW OF ENVIRONMENTAL ASSESSMENT, AND/OR IMPACT STATEMENT.
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1.1.17.11.	COMPILES AND REVIEWS DATA FOR ENVIRONMENTAL BASELINE SURVEY (EBS) AND ENVIRONMENTAL CLOSE OUT SURVEY (ECS).
1.1.17.12.	PREPARES EBS, ECS, AND STATEMENT OF FINDS.
1.1.17.13.	REVIEWS EBS/ECS PREPARED BY CONTRACTOR WHICH REQUIRES PHASE II STUDY.
1.1.18.	COORDINATES THE AIR INSTALLATION COMPATIBILITY USES ZONE PROGRAM.
1.1.18.1.	COMPILES AND REVIEWS AIRCRAFT NOISE DATA FOR LOW DURATION NOISE LEVEL CALCULATION AND CHARTING.
1.1.18.2.	COORDINATES NOISE AND CRASH INFORMATION. Coordinates noise and crash information with host airport authority or base facility for preparation of development plans/recommendations for the surrounding community.
1.1.19.	ASSISTS SUPPLY IN THE PLANNING AND IMPLEMENTATION OF A POLLUTION PREVENTION PROGRAM.
1.1.19.1.	ASSISTS SUPPLY IN ESTABLISHING POLLUTION BASELINE.
1.1.19.2.	ASSISTS IN THE IMPLEMENTATION OF THE HAZARDOUS WASTE MINIMIZATION PLAN.
1.1.19.3.	ASSISTS IN UPDATE OF THE SOLID WASTE RECYCLE AND RECOVERY PLAN.
1.1.19.4.	ASSISTS IN IMPLEMENTATION OF THE SOLID WASTE RECYCLE AND RECOVERY PLAN.
1.1.19.5.	ASSISTS IN UPDATING ENVIRONMENTAL PORTION OF THE POLLUTION PREVENTION PLAN, TO INCLUDE ASSOCIATED OPPORTUNITY ASSESSMENTS AND POLLUTANT EMISSIONS TRACKING/REDUCTION BASELINE.
1.1.19.6.	ASSISTS IN UPDATE AND MAINTENANCE OF CHLOROFLUOROCARBON (CFC) RECOVERY/REDUCTION PLAN.
1.1.20.	UPDATES THE HAZARDOUS WASTE MINIMIZATION PLAN WITH INPUT FROM BASE SUPPLY AND THE BIOENVIRONMENTAL ENGINEERING SECTION.
1.1.21.	PERFORMS TRAVEL TO TEMPORARY DUTY LOCATION.
1.1.22.	ASSURES COMPLIANCE WITH SPECIAL STATE OR LOCAL

	ENVIRONMENTAL REGULATION.
1.1.23.	MANAGES THE INSTALLATION'S NATURAL AND HISTORIC RESOURCES PROGRAM.
1.1.23.1.	UPDATES AND MAINTAINS NATURAL AND/OR HISTORIC RESOURCES SURVEY. Updates and maintains Wet Lands and/or Flood Plain Survey, Historic or Archeological Site Survey, and Endangered Species or Endangered Species Habitat Survey.
1.1.23.2.	DEVELOPS AND IMPLEMENTS PLAN OR STUDY. Develops and implements forestry, fish and wildlife, archeological, or other plan or study as needed.
1.1.23.3.	COORDINATES COOPERATIVE AGREEMENT NEGOTIATIONS WITH STATE AND FEDERAL OFFICIALS.
1.1.23.4.	COORDINATES ACTION TO REGISTER OR REMEDIATE ARCHEOLOGICAL OR HISTORICAL SITE.
1.1.23.5.	SERVES AS POINT OF CONTACT (POC). Serves as POC and represents the installation at public meeting for natural and historic resources.
1.1.24.	ATTENDS SPECIAL MEETING. Attends special Environmental Coordinator meeting. Attends State Environmental Coordinator meeting and Local Emergency Planning Committee meeting.
1.1.25.	PREPARES FOR UNIT TRAINING ASSEMBLY.
1.1.26.	MONITORS THE INSTALLATION RESTORATION PROGRAM (IRP).
1.1.26.1.	REVIEWS TECHNICAL DOCUMENTATION AND SERVES AS TECHNICAL COORDINATOR. Provides technical support to ANG/CEV and their contractor. Reviews and coordinates report, plan, or study. Performs review of state regulatory agency/Department of Defense Memorandum of Agreement and verifies performance. Prepares draft of technical information for release to the public. Arranges/hosts public meeting and site tour. Provides support/liaison with environmental regulator.
1.1.26.2.	MONITORS AND COORDINATES IRP ACTION. Identifies additional site for consideration. Provides technical assistance for preliminary assessment. Monitors contractor's performance of site investigation, remedial investigation/feasibility study actions, and site remedial action.
1.1.26.3.	COORDINATES WITH OTHER BASE OFFICE ON UTILIZATION OF IDENTIFIED IRP SITE.

1.1.26.4.	PROVIDES TECHNICAL ASSISTANCE. Provides technical assistance to base personnel on claim, inquiry, and/or issue, and maintains document for public information.
1.1.27.	SERVES AS A MEMBER OF THE HEALTH AND SAFETY COUNCIL. Council meets quarterly.
1.1.28.	PARTICIPATES IN THE HAZARDOUS MATERIALS PHARMACY (HAZMART) PROGRAM.
1.1.28.1.	ENSURES HAZMART OPERATIONS COMPLY WITH ENVIRONMENTAL REGULATIONS AND DIRECTIVES. Ensures operations comply with all Federal, State, and local environmental regulations and directives to ensure the proper handling, storage and disposal of all hazardous material (HM) items.
1.1.28.2.	REVIEWS AF IMT 3952, CHEMICAL HAZARDOUS MATERIAL REQUEST / AUTHORIZATION, FOR ENVIRONMENTAL CONCERNS. Reviews each request for environmental concerns as part of the HM authorization process. Assigns Issue Exception Code (IEX) 7 status for those items that are hazardous waste if an IEX has not already been assigned.
1.1.28.3.	IDENTIFIES ITEM WHICH IS OZONE DEPLETING SUBSTANCE (ODS). Identifies item which is ODS so it can be properly coded. Ensures necessary waivers are in place prior to HAZMART ordering any ODS.
1.1.28.4.	IMPLEMENTS WASTE MINIMIZATION PROCEDURE. Minimization procedures include material substitutions, process assessments, technology transfer, source reductions and recycling potential. Assists users in identifying less harmful substitute items.
1.1.28.5.	ASSISTS USER IN IDENTIFYING ANY HM ITEM THAT CAN BE RECYCLED OR RESIZED.
1.1.28.6.	PROVIDES TECHNICAL MANAGEMENT AND OVERSIGHT OF HAZMART PROGRAM. Ensures the proper collection and disposal of hazardous waste items.
1.1.28.7.	PROVIDES HAZARDOUS WASTE MANAGEMENT TRAINING. Provides training to those personnel whose duties involve handling hazardous waste in any manner.
1.1.28.8.	ADMINISTERS THE HAZMART INFORMATION TRACKING SYSTEM. Administers tracking system to ensure all Federal, State, and local reporting requirements are met.
1.1.28.9.	UPDATES APPLICABLE INSTALLATION PLAN. Updates plan according to current directives and base operational structure including the emergency planning

	requirements of the Emergency Planning and Community Right-to-Know Act (EPCRA) (Section 301-303). Completes an annual review to update all plans covering HM checklists and annexes.
1.1.28.10.	COMPLETES EPCRA REQUIREMENTS. Uses data supplied by HAZMART (Environmental Management Information System [EMIS]) to complete community right-to-know requirements (sections 301-312).
1.1.28.11.	PARTICIPATES AS MEMBER OF THE HAZARDOUS MATERIALS MANAGEMENT TEAM (HMMT).
2.	ENGINEERING AND TECHNICAL DESIGN.
2.1.	PERFORMS PROJECT PLANNING.
2.1.1.	PROCESSES REQUEST. Processes request for project design support through AF IMT 332 and other customer request input, to include identification of general scope of the request and preparation of project design folder.
2.1.2.	PERFORMS FACILITY SURVEY. Performs facility survey to determine physical condition of facility.
2.1.3.	COORDINATES PROJECT REQUEST. Coordinates project request with Real Estate on matters involving space authorization, allocation, or variation in space utilization.
2.1.4.	ASSISTS FACILITY MANAGER. Assists facility manager with analysis of recurring maintenance trends to identify major project for accomplishment through Sustainment, Restoration and Modernization (SRM), Minor Construction (MC), or Military Construction Program (MCP).
2.1.5.	REVIEWS INVENTORY SPACE SUMMARY. Evaluates Inventory Space Summary, RCS: HAF LEE (AR) 7115 report, and ensures data is updated to reflect facility survey condition codes.
2.1.6.	DEVELOPS SIX-YEAR SRM PLAN. Develops the six-year SRM plan based on physical condition of facility. Coordinates the SRM project and other facility survey data with the Installations Facilities Working Panel/Facilities Board.
2.2.	PERFORMS PROJECT PROGRAMMING.
2.2.1.	DEVELOPS FACILITY REQUIREMENTS PROGRAM (FRP). Develops annual six-year FRP submittal based upon facility survey. Includes programming projects by specific year and in specific funding program.
2.2.2.	PREPARES MILITARY CONSTRUCTION PROJECT. Prepares military construction project data to include major project element, associated cost, project justification, and other specific project requirement data. Includes preparation of

	DD Form 1390, FY Military Construction Program, and Guard and Reserve Military Construction.
2.2.3.	REVISES PROJECT DOCUMENT. Revises DD Form 1391 and 1391c, <i>Fiscal Year Military Construction Project Data (Continuation)</i> , resulting from review by higher headquarters/other agencies.
2.2.4.	DEVELOPS PROGRAM PROPOSAL. Develops program proposal for accomplishment of projects by in-house force, Priority Improved Management Effort – Base Engineer Emergency Force (Prime BEEF), Simplified Acquisition of Base Engineer Requirements (SABER), Task Order Contractor (TOC), Job Order Contract (JOC), or line-item construction contract.
2.2.5.	REVIEWS SIX-YEAR FRP. Briefs installation's Facilities Working Panel/Facilities Board on the recommended six-year FRP.
2.2.6.	MAINTAINS AUTOMATED CIVIL ENGINEER SYSTEM. Enters projects into database, ensures database accuracy, and adjusts when changes are made.
2.3.	PERFORMS PROJECT DESIGN.
2.3.1.	DESIGNS PROJECT IN-HOUSE.
2.3.1.1.	PERFORMS SITE SURVEY. Assembles data from as-built drawings, facility jacket folders, and other sources. Determines actual physical condition of existing facilities, performs measurement of actual system capacities, and determines changes needed in systems and facilities.
2.3.1.2.	SURVEYS PROJECT SITE. Locates reference points, field comers, bench marks, and grades for ditches, sidewalks, paving, streets, fences, building locations, structures, and interior dimensions with the use of a transit, engineer's level, chain, and rod to establish points for planning and design references, maps, drawings, and construction.
2.3.1.3.	PREPARES LAYOUT OF WORK SKETCHES AND INFORMATION AND PERFORMS DESIGN ANALYSIS. Develops plans and notes. Coordinates design requirements of the various engineering disciplines and organizes them into a cohesive and logical sequence. Performs design analysis from survey findings. Prepares rough sketches and notes to be used by draftsman to make final drawings. Applies value engineering principles.
2.3.1.4.	PREPARES PROJECT SPECIFICATION. Prepares specifications to include discussions of required quality standards, specific materials, and equipment items desired; extent and coverage of items under warranty or guarantee; required publications, manuals, and training; spare parts and special tools list; tests, samples, and certifications; procedures to be followed if materials fail to pass testing; safety and fire prevention; and Government Furnished Material (GFM)

	and its storage.
2.3.1.5.	DEVELOPS COST ESTIMATE. Develops and maintains a continuing Current Work Estimate (CWE) made up of the estimated cost, contingencies, supervision and administration, other direct costs, pending costs, GFM, and purchase orders.
2.3.1.6.	DRAFTS DESIGN. Drafts final plans, maps, and drawings required for a project from engineer's rough sketches.
2.3.1.7.	FINALIZES DESIGN. Revises plan, specification, and other aspects of the design resulting from the review process and prepares a final detailed cost estimate.
2.3.2.	DESIGNS PROJECT WITH ARCHITECTURE AND ENGINEERING (A-E) FIRM.
2.3.2.1.	DEVELOPS A-E SOW/PROJECT BOOK. Describes the project clearly, outlines the objective to be accomplished, specifies in detail the scope and nature of work, services, and material to be furnished by the A-E firm, the criteria, and special requirements to be followed in prosecution of work; outlines material information, and services to be supplied by the government; establishes production schedules, and estimates construction cost of facility and A-E fees.
2.3.2.2.	PROVIDES DATA FOR PUBLICATION. Lists project title, its location, scope of services required, estimated construction cost range, eligibility limitation, and special qualifications or performance data. Submits data to contracting function for coordination and further submittal for publication in the Commerce Business Daily if A-E fee is in excess of \$10,000.
2.3.2.3.	PREPARES AND MAINTAINS A-E QUALIFICATIONS FILE. Maintains current data indicating A-E qualifications consisting of properly executed Standard Form (SF) 254, <i>Architect-Engineer</i> , and <i>Related Services Questionnaire</i> .
2.3.2.4.	PARTICIPATES ON SELECTION BOARD OF A-E SERVICE. Prepares A-E Selection Board information. Participates on selection board for A-E contracts. Analyzes project and SOW to determine A-E services and expertise required. Evaluates qualification of A-E firms considered. Participates on selection board for A-E contracts. Analyzes project and SOW and evaluates qualifications of A-E firms considered.
2.3.2.5.	CONFERS AND NEGOTIATES WITH PROSPECTIVE A-E FIRM. Develops detailed example of type and quality of work expected of A-E contractors and indicates GFM as outlined in the SOW. Executes conference prior to negotiations with prospective A-E firm to ensure they have a thorough understanding of the project. Assists Contracting Officer in negotiating with A-E firm to develop an equitable contract.

2.3.2.6.	EXECUTES A-E CONTRACT. Collects data for A-E including project requirements, utility information, record drawing review, and site visit. Reviews A-E submittal for accuracy IAW contract documents. Processes requests for payment to A-E firm through contracting. Reviews project and incorporates technical comments from ANG/Civil Engineer (CE), various disciplines, and concerned base agencies for inclusion in the project. Reviews project to ensure comments identified in the review of preliminary work are incorporated in the final project.
2.3.2.7.	PREPARES REPORT OF ARCHITECT-ENGINEER CONTRACT AWARDS, RCS: DD I&L (Q)559. Prepares and submits to ANG/CE quarterly for A-E contracts of fees exceeding \$25,000.
2.3.2.8.	PREPARES PERFORMANCE EVALUATION REPORT FOR EACH CONTRACT WITH A-E FEES OVER \$10,000.
2.3.2.9.	MANAGES DESIGN FUNDS AS RESOURCE ADVISOR (RA). Tracks design funding and coordinates with Finance.
2.3.3.	DEVELOPS INDEFINITE DELIVERY A-E FIRM.
2.3.3.1.	DEVELOPS A-E SOW/PROJECT BOOK. Describes the project clearly; outlines the objective to be accomplished; specifies in detail the scope and nature of work, services, and material to be furnished by the A-E firm, the criteria, and special requirements to be followed in prosecution of work; outlines material, information, and services to be supplied by the government; establishes production schedules, and estimates construction cost of facility, and A-E fees.
2.3.3.2.	PROVIDES DATA FOR PUBLICATION. Lists possible projects, their location, scope of services required, eligibility limitation, and special qualifications, or performance data. Submits data to contracting function for coordination and further submittal for publication in the Commerce Business Daily.
2.3.3.3.	PREPARES AND MAINTAINS A-E QUALIFICATIONS FILE.
2.3.3.4.	PARTICIPATES ON SELECTION BOARD OF A-E SERVICE. Prepares A-E Selection Board information. Participates on preselection board for A-E contracts. Analyzes project and SOW to determine A-E services and expertise required. Evaluates qualification of A-E firms considered. Participates on final selection board for A-E contracts.
2.3.3.5.	CONFERS AND NEGOTIATES WITH PROSPECTIVE A-E FIRM. Develops detailed example of type and quality of work expected of A-E contractors and indicates material furnished by the government as outlined in the SOW. Assists Contracting Officer in negotiating with A-E firm to develop an equitable contract.

2.3.3.6.	PREPARES REPORT OF ARCHITECT-ENGINEER CONTRACT AWARDS, RCS: DD I&L (Q)559. Prepares and submits form to ANG/CE quarterly for A-E contracts of fees exceeding \$25,000.
2.3.3.7.	PREPARES PERFORMANCE EVALUATION REPORT. Prepares DD Form 1413, <i>Performance Evaluation Architect- Engineer Professional Services</i> , for each contract with A-E fees over \$10,000.
2.4.	MONITORS PROJECT CONSTRUCTION.
2.4.1.	COORDINATES IN-HOUSE/PRIME BEEF CONSTRUCTION
2.4.1.1.	COORDINATES PROJECT. Coordinates project with facility manager to schedule project accomplishment, and advises customer of scheduled start date and estimated completion date.
2.4.1.2.	INSPECTS PROJECT SITE. Inspects site to ensure compliance with project plans and specifications. Provides project status.
2.4.1.3.	UPDATES AS-BUILT DRAWING. Updates as-built drawings upon completion of project.
2.4.1.4.	MANAGES CONSTRUCTION FUNDS AS RA. Tracks funding and coordinates with Finance.
2.4.2.	DEVELOPS SIMPLIFIED ACQUISITION OF SABER/JOC CONTRACT.
2.4.2.1.	DEVELOPS SOW. Develops SOW including line item materials to be used, material costs, material quantities, project lists, schedules, and specifications for project accomplishment.
2.4.2.2.	SUBMITS PROJECT. Submits project requirements to contracting for action to include the SOW and a project synopsis.
2.4.2.3.	NEGOTIATES PROJECT. Negotiates project requirements with contractor.
2.4.2.4.	INSPECTS PROJECT. Inspects project to ensure compliance with plans and specifications. Provides technical consultation of projects requirements and any changes necessary. Provides project status update and updates as-built drawings upon completion of project.
2.4.2.5.	MANAGES CONSTRUCTION FUNDS AS RA. Tracks funding and coordinates with Finance.
2.4.3.	COMPLETES LINE ITEM CONTRACT CONSTRUCTION.
2.4.3.1.	ASSEMBLES PROJECT DATA. Assembles project data for contracting action including letter or request, DD Form 1391 data, project synopsis for Commerce

	Business Daily advertisement, and liquidated damages estimate.
2.4.3.2.	REVISES PROJECT DATA. Revises submittal package to comply with changes required by contracting office.
2.4.3.3.	PREPARES BID SCHEDULE. Compiles data from working drawings and design analysis into a bid schedule.
2.4.3.4.	REPRODUCES DRAWING AND SPECIFICATION. Reproduces the complete final project packages for contracting using blue print machine or ozalid method. Assembles project package.
2.4.3.5.	ESCORTS PROSPECTIVE BIDDER. Escort's prospective bidder to the job site to ensure an understanding of all contract requirements.
2.4.3.6.	ATTENDS PRE-BID CONFERENCE. Discusses project with contracting to ensure inclusion of all contracted requirements and elimination of any ambiguities that would cause issuance of contract change orders.
2.4.3.7.	ATTENDS BID-OPEN CONFERENCE. Reviews bids received by contracting to determine if bids are realistic to the scope and quality of work required and advises contracting of results.
2.4.3.8.	SCHEDULES PRE-CONSTRUCTION CONFERENCE. Establishes meeting time, place, and attendees.
2.4.3.9.	ATTENDS PRE-CONSTRUCTION CONFERENCE. Discusses all items on the Pre-Performance Conference and Pre-Final Payment Checklist with attendees to ensure requirements and procedures are understood.
2.4.3.10.	REVIEWS MATERIAL SUBMITTAL. Ensures the materials the contractor proposes to use comply with the contract requirements.
2.4.3.11.	INVESTIGATES CHANGE IN SITE CONDITION. Physically inspects work site to determine functional requirements and adapts the project design to the changed site conditions.
2.4.3.12.	COORDINATES ON USING AGENCY CHANGE OR DESIGN DEFICIENCY. Prepares documentation to define necessary change resulting from using agency criteria or design deficiencies occurring during the design or construction phase of a project. Prepares cost estimate.
2.4.3.13.	INITIATES CONTRACT MODIFICATION. Reviews contract specifications and design documents, revises cost estimates and specifications, and coordinates scope of change order with contracting.
2.4.3.14.	VISITS SITE TO INSPECT CONSTRUCTION. Physically inspects work site to

	ensure construction is progressing as scheduled.
2.4.3.15.	UPDATES PROGRESS LOG. Updates daily construction log.
2.4.3.16.	EXAMINES CONSTRUCTION PROGRESS SCHEDULE. Examines progress schedule submitted by construction contractor and verifies progress.
2.4.3.17.	COORDINATES REQUEST FOR PAYMENT. Recommends approval or disapproval of contractor requests for payment based on construction progress.
2.4.3.18.	PREPARES FINAL PUNCH LIST. Inspects work site and identifies any deficiencies to ensure the overall aspects of the contractor's performance conform to contract requirements.
2.4.3.19.	ATTENDS FINAL ACCEPTANCE INSPECTION. Inspects work site to identify any deficiencies and ensures the overall aspects of the contractor's performance conforms to standards.
2.4.3.20.	PREPARES DESIGN AND CONSTRUCTION MANAGEMENT REPORT, RCS: HAF-PRE (AR)7124. Maintains records of design time expended for reimbursement of design costs, determines information to be updated, updates, and forwards to NGB/DE.
2.4.3.21.	PREPARES AS-BUILT DRAWING. Transcribes as-built information to appropriate as-built drawings/files.
2.4.3.22.	PREPARES PROJECT CLOSEOUT. Coordinates elements of project closeout including real estate/real property, equipment training/familiarization for in-house maintenance force, and project data filing.
2.4.3.23.	UPDATES PROJECT FUNDING INFORMATION. Prepares, briefs, records, and consults with appropriate managers on project costs, adjustments, and final costs.
2.4.3.24.	MANAGES CONSTRUCTION FUNDS AS RA. Tracks funding and coordinates with Finance.
2.5.	MANAGES UTILITY CONTRACT.
2.5.1.	PREPARES UTILITY BROCHURE. Develops service specifications by determining the need and surveying the requirement for the utility. Compiles all pertinent documentation reflecting the status of the contract.
2.5.2.	UPDATES UTILITY BROCHURE. Reviews contents of brochure and ensures all pertinent documentation is up-to-date. Reviews operation information, out-of-service periods, utility invoices, actual operating expenses, and revisions to service specifications.

2.5.3.	REVIEWS UTILITY INVOICE. Reviews and computes utility invoice to ensure quantities billed are accurate and rates are correctly applied and reasonable.
2.5.4.	PREPARES UTILITY RESALE BROCHURE. Prepares a utility resale brochure for each reimbursing activity to include estimated usage.
2.5.5.	UPDATES UTILITY RESALE BROCHURE. Prepares a utility resale brochure to ensure usage and notifies appropriate office of any required change.
2.5.6.	MANAGES FUNDS AS RA. Tracks funding and coordinates with Finance.
2.6.	MANAGES RECURRING SERVICE CONTRACT.
2.6.1.	PERFORMS SITE SURVEY. Confers with requester, determines specific requirements for the contract, visits as required to gather field data, and reviews as-built drawings.
2.6.2.	PREPARES OR REVISES TECHNICAL SPECIFICATION. Prepares or revises layout of work sketches and requirement data. Prepares or revises SOW to include quality standards, performance requirements, personnel qualifications, materials and equipment items required, performance schedules, and methods of inspection.
2.6.3.	DEVELOPS COST ESTIMATE. Develops cost estimate containing personnel, equipment, material, overhead and profit, and contingency costs.
2.6.4.	PREPARES PROJECT PACKAGE FOR CONTRACTING.
2.6.4.1.	PREPARES BID SCHEDULE. Compiles data from drawings and SOWs into a bid schedule indicating the manner in which bids will be received by item.
2.6.4.2.	REPRODUCES DRAWING AND SPECIFICATION. Prepares or assembles the required number of completed final contract packages for contracting.
2.6.4.3.	REQUESTS FUNDING. Requests and obtains funding authority on AF IMT 9, Request for Purchase, and inserts this document in contract folder.
2.6.5.	ATTENDS PRE-BID CONFERENCE. Discusses project with contracting to ensure inclusion of all contracted requirements and elimination of any ambiguities that could cause issuance of contract change orders.
2.6.6.	REVISES CONTRACT SPECIFICATION. Changes requirements, SOW, and cost estimates at the request of contracting.
2.6.7.	ESCORTS PROSPECTIVE BIDDER TO JOB SITE. Upon notification by contracting, coordinates with prospective bidder and escorts to the job site to preclude overlooking contract requirements.

2.6.8.	ATTENDS BID OPEN CONFERENCE. Reviews bids received by contracting to determine if bids are realistic to the scope and quality of work required and provides advice to contracting.
2.6.9.	ATTENDS PRE-PERFORMANCE CONFERENCE. Discusses all pertinent items in contract specifications with all attendees to ensure requirements and procedures are understood.
2.6.10.	REVIEWS MATERIAL SUBMITTAL. Confirms that contractor supplied materials comply with the contract specifications.
2.6.11.	INITIATES CONTRACT MODIFICATION. Reviews SOW, revises cost estimates, and coordinates scope of change order with contracting.
2.6.12.	PERFORMS QUALITY ASSURANCE. Inspects the service being performed to ensure it complies with contract requirements.
2.7.	MANAGES NON-RECURRING SERVICE CONTRACT.
2.7.1.	DETERMINES REQUIREMENT. Determines specific requirements of the requester by reviewing as-built drawing, visiting the work site, and conferring with the requester.
2.7.2.	DEVELOPS COST ESTIMATE. Develops cost estimate containing personnel, equipment, material, overhead and profit, and contingency costs.
2.7.3.	REQUESTS FUNDING. Requests and obtains funding authority on AF IMT 9 and inserts this document in contract folder.
2.7.4.	PREPARES SOW. Prepares SOW to include complete description of service required, location, materials, drawings, and time requirements for accomplishment. Includes drawings when necessary.
2.7.5.	DRAFTS TRANSMITTAL LETTER. Provides general comments and summary of the contract requirements.
2.7.6.	INITIATES CONTRACT MODIFICATION. Reviews original contract specification, revises cost estimates, and coordinates scope of change with contracting.
2.7.7.	PERFORMS QUALITY ASSURANCE. Inspects the service being performed to ensure it complies with contract requirements.
2.8.	PROVIDES SURVEY SUPPORT.
2.8.1.	PERFORMS AIRFIELD OBSTRUCTION SURVEY. Establishes clear and approach zones; identifies and locates such objects as trees, buildings, towers, etc.,

	that may encroach upon the clear zones.
2.8.2.	PERFORMS REAL ESTATE SURVEY. Performs land survey and measurements of real estate boundaries concerning acquisitions, disposals, easements, and leased areas.
2.8.3.	PERFORMS AIRFIELD PAVEMENT CONDITION SURVEY.
2.8.3.1.	PERFORMS CONDITION SURVEY. Performs a complete survey of all airfield pavements to determine condition, strength, and performance data, and notes any discrepancies.
2.8.3.2.	PREPARES EVALUATION REPORT. Prepares evaluation report on data obtained during survey and submits to ANG/CE.
2.8.3.3.	INITIATES CORRECTIVE ACTION. Submits work request to initiate corrective action on airfield discrepancies found during survey.
2.8.4.	PERFORMS BASE ROAD PAVEMENT CONDITION SURVEY.
2.8.4.1.	PERFORMS CONDITION SURVEY.
2.8.4.2.	PREPARES EVALUATION REPORT.
2.8.4.3.	INITIATES CORRECTIVE ACTION.
2.8.5.	PERFORMS ROOF INSPECTION.
2.8.5.1.	PERFORMS CONDITION SURVEY.
2.8.5.2.	PREPARES EVALUATION REPORT.
2.8.5.3.	INITIATES CORRECTIVE ACTION.
2.9.	PROVIDES ENGINEERING SUPPORT.
2.9.1.	MANAGES CORROSION CONTROL PROGRAM.
2.9.1.1.	REVIEWS PROJECT. Reviews designed project for corrosion control aspects.
2.9.1.2.	REVIEWS BOILER LOG. Ensures boiler water is being maintained in proper chemical balance to avoid corrosive action on interior of heating fixtures.
2.9.1.3.	REVIEWS CATHODIC PROTECTION SYSTEM LOG. Ensures cathodic protection systems are being maintained properly and are providing adequate protection.

2.9.2.	MANAGES ENERGY CONSERVATION PROGRAM.
2.9.2.1.	COMPILES DATA. Collects energy consumption data from on-base agencies to determine monthly usage and calculates percent variance between baseline year and current year.
2.9.2.2.	PREPARES REPORT. Prepares Energy Consumption Report.
2.9.2.3.	DISSEMINATES INFORMATION. Briefs Energy Committee and Facilities Board on the Energy Program.
2.9.2.4.	PREPARES ENERGY VULNERABILITY ASSESSMENT REPORT. Prepares the report and coordinates it with the installation staff.
2.9.2.5.	COORDINATES ENERGY CONSERVATION TASK GROUP MEETINGS AND INITIATIVES.
2.9.3.	MANAGES TRAFFIC ENGINEERING PROGRAM.
2.9.3.1.	PROVIDES TECHNICAL ASSISTANCE. Provides technical assistance to Security Forces, Safety, or other agency concerning traffic problems.
2.9.3.2.	IDENTIFIES TRAFFIC PROJECT. Identifies project to implement new traffic flow and control requirements.
2.9.3.3.	ATTENDS TRAFFIC CONTROL MEETING. Prepares for and attends traffic control meeting.
2.9.4.	PERFORMS FALLOUT SHELTER ANALYSIS.
2.9.4.1.	DETERMINES REQUIREMENT. Reviews base population figures, fallout shelter structural requirements, and base disaster preparedness plans to determine needs.
2.9.4.2.	IDENTIFIES FALLOUT SHELTER. Reviews as-built drawings and visits facility to determine condition and what improvements are needed.
2.9.5.	PROVIDES TECHNICAL ASSISTANCE TO PLANNING ON IN-HOUSE WORK ORDER. Assists shop supervisors as required, to complete technical aspects of work order with respect to identifying special equipment or materials, identifying proper methods of job accomplishment, providing accurate cost estimates, and evaluating impact of proposed work on existing facilities.
2.9.6.	REVIEWS RECURRING MAINTENANCE PROGRAM. Provides periodic technical assistance for reviewing the Recurring Maintenance File and Recurring Maintenance Schedule to determine what new items are added to the file and what items are deleted.

2.9.7.	PROVIDES ENGINEERING CONSULTATION. Provides engineering consultation on drawings in file and provides copies of plans and drawings for inhouse and external agency use.
2.10.	PERFORMS COMPREHENSIVE PLANNING.
2.10.1.	DEVELOPS BASE COMPREHENSIVE PLAN (BCP).
2.10.1.1.	COLLECTS DATA. Surveys and collects data for analysis identifying existing land and facility resources.
2.10.1.2.	ANALYZES MISSION REQUIREMENT. Analyzes installation mission requirements and identifies facilities needed to support the mission. Includes concept plans and site plans for location of mission facilities on the installation.
2.10.1.3.	MANAGES A-E SOW. Manages the A-E SOW for the BCP including A-E selection, fee negotiations, and project coordination.
2.10.1.4.	COORDINATES BCP. Coordinates the BCP with installation command and planning staffs.
2.10.1.5.	PERFORMS ANNUAL REVIEW. Annually reviews, updates, and submits BCP to higher headquarters.
2.10.2.	PREPARES/PRESENTS AIR INSTALLATION COMPATIBLE USE ZONE (AICUZ).
2.10.2.1.	CONDUCTS LOCAL/REGIONAL PLANNING COORDINATION. Meets with counterpart planning agency on matters of mutual concern and reviews local planning proposal that would impact ANG mission capability at the base.
2.10.2.2.	COLLECTS DATA. Collects data from mission operations to support preparation of the AICUZ report. Coordinates with higher headquarters in the preparation of the report. Reconciles AICUZ program with the BCP to include analysis of mission impact.
2.10.2.3.	PERFORMS BIENNIAL REVIEW. Performs biennial review of AICUZ program, updates as required, and briefs installation command and planning personnel on status.
2.10.3.	PREPARES EXPLOSIVE SAFETY PLAN.
2.10.3.1.	RESEARCHES EXPLOSIVE SAFETY. Researches installation explosive safety mission requirement including facility types, locations and quantity distance criteria for each storage location. Includes coordination with Safety office. Reconciles explosive safety siting with BCP.

2.10.3.2. PREPARES WAIVER. Prepares waiver, deviation, and explosive safety site plan according to regulatory criteria. Includes installation explosive safety map. Coordinates map with installation command and planning staffs.  2.10.3.3. PREPARES PACKAGE. Prepares explosive safety submittal package to ANG/Safety (SE), AFISC/SE, and DDESB.  2.10.3.4. IMPLEMENTS CHANGE. Implements change to explosive safety package as mandated by the NGB.  2.11. PERFORMS DATA PROCESSING MANAGEMENT.  2.11.1. DEVELOPS DATA PROCESSING MANAGEMENT. Develops, executes, and conducts base-level management of data processing assets; plans and programs for data management and tracking. Coordinates purchase of system and program with Communications management, Base Supply, Comptroller, and Contracting office.  2.11.2. CHAIRS BCE COMPUTER USERS' GROUP. Chairs base-level Civil Engineer Computer Users' Group to establish requirement and location of both hardware and software.  2.11.3. CONDUCTS COMPUTER TRAINING. Coordinates with training manager to ensure all required training is available to ensure upgrading of skills and familiarity with all data systems in use within Civil Engineering.  2.12. MANAGES BASE-LEVEL GEOGRAPHICAL INFORMATION SYSTEM (GIS).  2.12.1. WRITES SOW FOR OUTSIDE FIRM TO ACCOMPLISH WORK FOR THE BASE GIS SYSTEM.  2.12.2. UPDATES INFORMATION FOR THE BASE GIS SYSTEM.  2.12.3. ANALYZES DATA USING THE GIS DATABASE.  2.13. DEVELOPS PRODUCT USING COMPUTER AIDED-DRAFTING AND DESIGN (AUTO-CADD). Works with Auto-CADD to develop drawing using computer aided drafting and design.  2.14. PROVIDES CONFERENCE SUPPORT.  2.14.1. PROVIDES COMPUTER SUPPORT FOR CIVIL ENGINEERING CONFERENCE. Works with customers to provide computers. Sets up systems and ensures connectivity.		
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1 '	2.14.1.	CONFERENCE. Works with customers to provide computers. Sets up systems
	2.14.2.	

2.15.	MONITORS BACKFLOW PREVENTOR PROGRAM. Tests existing backflow preventors and reviews construction designs for code compliance.
2.16.	ADMINISTERS AUTOMATED CIVIL ENGINEER SYSTEM (ACES) TRAINING.
3.	OPERATIONS/FACILITY MANAGEMENT.
3.1.	MANAGES PHYSICAL PLANT OPERATION. Plans, organizes, directs, and controls work activities of the facilities management area as prescribed by ANG directives, AFIs, and other professional standards.
3.1.1.	DEVELOPS, MONITORS, AND REVIEWS BUILDING MAINTENANCE CONTRACT TO ENSURE COMPLIANCE WITH CONTRACT SPECIFICATIONS.
3.1.2.	CONDUCTS FACILITY SURVEY. Determines program needs and develops more effective policies, practices, and procedures.
3.1.3.	IDENTIFIES, RESOLVES, AND DEVELOPS PLAN TO CORRECT CURRENT OR POTENTIAL MAINTENANCE PROBLEM.
3.1.4.	INSPECTS AND EVALUATES FACILITY CONSTRUCTION AND RENOVATION PROJECT.
3.1.5.	DEVELOPS AND REGULATES FACILITY CLEANING SURVEY.
3.1.6.	FORMULATES POLICY, PROCEDURE, AND GUIDELINE FOR EMPLOYEES.
3.1.7.	DEVELOPS TRAINING PROCESS AND CHECKLIST FOR CUSTODIAL SERVICE PERSONNEL.
3.1.8.	MONITORS IMPLEMENTATION AND RESULTS OF STRATEGIC AND OPERATIONAL MAINTENANCE PLAN.
3.1.9.	SELECTS THE MOST COST-EFFECTIVE METHOD OF MAINTENANCE AND OPERATION. Reviews cost effectiveness of out sourcing versus in-house resources. Examples include, but are not limited to, service and repair of lawnmowers, custodial services, and preventive maintenance.
3.1.10.	DEVELOPS PROGRAM TO CONSERVE ENERGY.
3.1.11.	ENSURES WORK PRACTICES ARE IAW AIR FORCE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (AFOSHA), OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), AND OTHER FIRE & SAFETY

REGULATIONS.  3.1.12. CONDUCTS FACILITY AUDIT.  3.1.13. OVERSEES SNOW REMOVAL OPERATION.  3.1.14. ANALYZES RECURRING MAINTENANCE TREND FOR FUT PROJECT CONSIDERATION.	TURE
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	ΓURE
3.2. PERFORMS BUDGETING AND FINANCIAL MANAGEMENT	Γ.
3.2.1. ESTABLISHES AND PREPARES AF IMT 616, FUND CITE AU (FCA). Establishes fund cites for base utilities and payroll account	
3.2.2. DEVELOPS AND SUBMITS FINANCIAL PLAN. Coordinates 1	plan with ANG.
3.2.3. PREPARES AND MONITORS BCE ANNUAL FACILITY OPER MAINTENANCE AGREEMENTS (FOMA) BUDGET.	RATIONS AND
3.2.4. INPUTS FINANCIAL DATA TO AUTOMATED BUSINESS SE SYSTEM (ABSS).	ERVICE
3.2.5. APPROVES OR DISAPPROVES FINANCIAL DOCUMENT UT ABSS.	ΓILIZING
3.2.6. VALIDATES AND CORRECTS FINANCIAL ELEMENT OF EXIDENTIFICATION CODE (EEIC) IAW ANG FINANCIAL GUIDANCIAL G	
3.2.7. PREPARES OPTIONAL FORM (OF) 1017-G, JOURNAL VOUC	HER.
3.2.8. VALIDATES UTILITY INVOICE AND MAKES PAYMENT TO WITH CREDIT CARD. May be required to coordinate utility pay Accounting and Finance office.	
3.3. PERFORMS PROJECT MANAGEMENT.	
3.3.1. REVIEWS, PRIORITIZES, AND AUTHORIZES LOCAL PROJE MONETARY APPROVAL AUTHORITY.	ECT WITHIN
3.3.2. TRACKS PROJECT STATUS FOR COMPLETENESS AND CL	OSEOUT.
3.3.3. COORDINATES PROJECT CLOSEOUT WITH APPROPRIATE SUCH AS PRODUCTION CONTROL AND REAL PROPERTY.	
3.3.4. WRITES PROJECT SPECIFICATIONS.	
3.3.5. CONTROLS WORK IN PROGRESS. Establishes standards, mon	nitors

	performance, and takes corrective action.
3.4.	PROVIDES LOGISTIC SUPPORT. Purchases materials, services, and equipment to support the various construction, maintenance, and repair activities.
3.4.1.	VALIDATES MATERIAL AND SUPPLY PURCHASE REQUISITIONED WITHIN CIVIL ENGINEERING. These purchases include local purchase, prime vendor, contracting, and standard base supply.
3.4.2.	REQUISITIONS MATERIALS AND SUPPLIES THROUGH DEFENSE INDUSTRIAL SUPPLY CENTER (PRIME VENDOR PROGRAM).
3.4.3.	INSPECTS ITEM FOR QUANTITY AND QUALITY, AS COMPARED TO INVOICE DOCUMENT.
3.4.4.	APPROVES, RESEARCHES, AND WRITES SPECIFICATIONS FOR ITEM TO BE PURCHASED.
3.4.5.	DEVELOPS AND REQUESTS STAFF SUPPORT TASKING AND COORDINATES WITH FRANCHISE BUSINESS ACTIVITY.
3.4.6.	OVERSEES THE ACCOUNTABILITY OF CIVIL ENGINEERING SUPPLIES, TOOLS, EQUIPMENT, AND VEHICLES.
3.5.	MANAGES CONTRACT SERVICES.
3.5.1.	PREPARES PERFORMANCE WORK STATEMENT.
3.5.2.	MONITORS PERFORMANCE WORK STANDARD.
3.5.3.	INSPECTS CONTRACTOR'S WORK AND COORDINATES PAYMENT PROCESS.
3.5.4.	OVERSEES PERSONNEL FOR GROUNDS MAINTENANCE AND BUILDING CUSTODIAL SERVICES.
3.5.5.	REVIEWS A&E FIRM FOR QUALIFICATIONS.
3.5.6.	MAINTAINS, MONITORS, AND VALIDATES CONTRACTOR'S TIME AND ATTENDANCE REPORT.
3.5.7.	COORDINATES CONTRACTOR/VENDOR ADMITTANCE TO BASE. Advises gate, identifies personnel, and ensures proper documentation.
3.6.	MANAGES WORK AUTHORIZATIONS AND REQUIREMENTS.
3.6.1.	REVIEWS, APPROVES OR DISAPPROVES WORK REQUEST.

3.6.2.	REVIEWS AND PRIORITIZES WORK ORDER LIST WITH PRODUCTION CONTROL SUPERVISOR.
3.6.3.	REVIEWS WORK ORDER TO DETERMINE BEST METHOD AND RESOURCES TO COMPLETE APPROVED WORK ORDER (IN-HOUSE VS CONTRACT, ETC.).
3.6.4.	ESTABLISHES LOCAL PROCEDURE FOR BCE WORK CLEARANCE REQUEST.
3.6.5.	COORDINATES BCE WORK CLEARANCE REQUEST WITH APPROPRIATE SECTION.
3.7.	COORDINATES VISITING PRIME BEEF OR CIVIL ENGINEERING UNIT DEPLOYMENT. Coordinates rental equipment, prepares SOW, and coordinates with Contracting.
4.	LIQUID FUELS
4.1.	PERFORMS TANK MAINTENANCE.
4.1.1.	PERFORMS RECURRING MAINTENANCE. Performs external inspection, testing, adjusting, minor corrosion control (touch-up coating or painting), and similar task.
4.1.1.1.	MAINTAINS EXTERIOR OF FLOATING ROOF PONTOON TYPE (OPEN OR COVERED TOP) BULK STORAGE TANK.
4.1.1.2.	MAINTAINS EXTERIOR OF CONE ROOF (FIXED ROOF) BULK STORAGE TANK.
4.1.1.3.	MAINTAINS EXTERIOR OF CONE ROOF WITH FLOATING PAN BULK STORAGE TANK.
4.1.1.4.	MAINTAINS EXTERIOR OF ABOVE GROUND HORIZONTAL BULK STORAGE TANK.
4.1.1.5.	MAINTAINS EXTERIOR OF BELOW GROUND BULK STORAGE TANK.
4.1.1.6.	MAINTAINS EXTERIOR OF ABOVE GROUND OPERATING TANK.
4.1.1.7.	MAINTAINS EXTERIOR OF BELOW GROUND OPERATING TANK.
4.1.1.8.	MAINTAINS MOTOR GASOLINE (MOGAS) AND DIESEL STATION. Maintains pumps, tanks, piping, gauging, dispenser, and fuel master key systems and electronics.

4.1.1.9.	MAINTAINS OIL WATER SEPARATOR.
4.1.1.10.	MAINTAINS HOT PIT REFUELING AREA. Maintains tanks, piping, and gauging.
4.1.1.11.	MAINTAINS AUTOMATIC TANK GAUGING SYSTEM. Maintains, inspects, repairs, and calibrates system.
4.1.2.	PERFORMS NONRECURRING MAINTENANCE. Performs evaluation, prepares system for work, accomplishes maintenance, and tests as necessary.
4.1.2.1.	PERFORMS INTERIOR TANK MAINTENANCE.
4.1.2.1.1.	MAINTAINS INTERIOR OF ABOVE GROUND AVIATION FUEL BULK STORAGE TANK.
4.1.2.1.2.	MAINTAINS INTERIOR OF BELOW GROUND AVIATION FUEL BULK STORAGE TANK.
4.1.2.1.3.	MAINTAINS INTERIOR OF ABOVE OR BELOW GROUND AVIATION FUEL OPERATING TANK.
4.1.2.1.4.	MAINTAINS INTERIOR OF OTHER TANK.
4.1.2.2.	REMOVES SNOW OR WATER FROM OPEN TYPE FLOATING ROOF TANK.
4.2.	PERFORMS VALVE MAINTENANCE.
4.2.1.	PERFORMS RECURRING MAINTENANCE. Performs inspection, testing, adjusting, lubrication, bolt tightening, minor corrosion control (touch-up painting), and similar task.
4.2.1.1.	MAINTAINS LUBRICATED PLUG VALVE.
4.2.1.2.	MAINTAINS NON-LUBRICATED PLUG VALVE.
4.2.1.3.	MAINTAINS GATE VALVE.
4.2.1.4.	MAINTAINS AUTOMATIC COMBINATION FUELING AND DEFUELING VALVE.
4.2.1.5.	MAINTAINS FUELING VALVE.
4.2.1.6.	MAINTAINS DEFUELING VALVE.
4.2.1.7.	MAINTAINS HIGH LEVEL CONTROL VALVE.

4010	MAINTAING ELANGED ELOAT CONTEDOL MALVE
4.2.1.8.	MAINTAINS FLANGED FLOAT CONTROL VALVE.
4.2.1.9.	MAINTAINS HYDRANT ADAPTER OR COUPLER VALVE.
4.2.1.10.	MAINTAINS NONSURGE CHECK VALVE.
4.2.1.11.	MAINTAINS FUEL DISCHARGE VALVE.
4.2.1.12.	MAINTAINS RATE OF FLOW CONTROL VALVE.
4.2.1.13.	MAINTAINS BALL VALVE.
4.2.1.14.	MAINTAINS PRESSURE RELIEF VALVE (50AF-2 OR SIMILAR).
4.2.1.15.	MAINTAINS PRESSURE RELIEF VALVE (SMALL TYPE SPRING ACTUATED).
4.2.1.16.	MAINTAINS COMBINATION DUAL PRESSURE RELIEF SOLENOID SHUT OFF AND CHECK VALVE.
4.2.1.17.	MAINTAINS WATER DRAIN OR WATER DISCHARGE VALVE.
4.2.1.18.	MAINTAINS CHECK VALVE.
4.2.1.19.	MAINTAINS SOLENOID CONTROL VALVE.
4.2.1.20.	MAINTAINS REFUELING HYDRANT CONTROL VALVE.
4.2.1.21.	MAINTAINS REMOTE CONTROL VALVE.
4.2.2.	PERFORMS NONRECURRING MAINTENANCE. Troubleshoots to localize problem, prepares system area for work, accomplishes repair, and tests as necessary.
4.2.2.1.	PERFORMS ON-SITE REPAIR.
4.2.2.2.	PERFORMS IN-SHOP REPAIR. Removes, repairs, and reinstalls valve assembly.
4.2.2.3.	REPLACES VALVE. Removes present valve assembly and prepares and fits replacement valve into system.
4.3.	PERFORMS PUMP MAINTENANCE.
4.3.1.	PERFORMS RECURRING MAINTENANCE. Performs inspection, testing, adjusting, lubrication, bolt tightening, minor corrosion control (touch-up painting), and similar task.

4.3.1.1.	MAINTAINS HORIZONTAL CENTRIFUGAL PUMP.
4.3.1.2.	MAINTAINS HORIZONTAL TURBINE CENTRIFUGAL PUMP.
4.3.1.3.	MAINTAINS ROTARY POSITIVE DISPLACEMENT PUMP.
4.3.1.4.	MAINTAINS RECIPROCATING PUMP.
4.3.1.5.	MAINTAINS DEEP WELL VERTICAL TURBINE PUMP.
4.3.1.6.	MAINTAINS VEHICLE STATION PUMP.
4.3.1.7.	MAINTAINS SUMP PUMP.
4.3.1.8.	MAINTAINS HAND PUMP (PRODUCT RECOVERY SYSTEM).
4.3.1.9.	MAINTAINS BARGE DOCK.
4.3.1.9.1.	MAINTAINS DOCK PUMP G301 BARGE BOOSTER PUMP.
4.3.1.9.2.	MAINTAINS DOCK PRESSURE GAUGE. Ensures gauge is tested and calibrated annually or as required. Caps off open pipe when gauge requires replacement.
4.3.1.9.3.	MAINTAINS DOCK BARGE LOADING ARM.
4.3.1.9.4.	MAINTAINS DOCK VALVES.
4.3.1.9.5.	PERFORMS DOCK HYDROSTATIC TEST. Performs hydrostatic test on underground piping.
4.3.1.9.6.	MAINTAINS DOCK SIGN.
4.3.1.9.7.	MAINTAINS DOCK ELECTRICAL STATIC GROUND.
4.3.1.9.8.	PERFORMS CATHODIC PROTECTION INSPECTION.
4.3.1.9.9.	INSPECTS BARGE LOADING ARM DRAIN PUMP.
4.3.1.9.10.	INSPECTS PIPING.
4.3.1.9.11.	CHECKS DOCK AND TANK FARM EMERGENCY SHOWER AND EYEWASH. Inspects visually for damage and inspects discharge of both functions.
4.3.1.9.12.	CHECKS DOCK OIL WATER SEPARATOR. Checks oil water separator tank located at truck fill stand, tank farm and dock unloading area. Assists contractor if

	needed in cleaning separators.
	needed in cleaning separators.
4.3.1.9.13.	MAINTAINS AIRCRAFT AND STRUCTURAL FIRE SIMULATORS.
4.3.1.9.14.	REMOVES BARGE BOOM, CLEANS AND REPAIRS.
4.3.1.9.15.	PERFORMS CRANE LOAD TESTING AT TANK FARM.
4.3.1.9.16.	CLEANS ELECTRICAL CONTACTS AT TANK FARM.
4.3.1.9.17.	OPENS TANK FARM FOR PETROLEUM, OIL, AND LUBRICANTS (POL) SECTION.
4.3.2.	PERFORMS NONRECURRING MAINTENANCE. Troubleshoots to localize problem, prepares system for work, accomplishes repair, and tests as necessary.
4.3.2.1.	PERFORMS ON-SITE REPAIR.
4.3.2.2.	PERFORMS IN-SHOP REPAIR. Removes, repairs, and reinstalls pump assembly.
4.3.2.3.	REPLACES PUMP. Removes present pump assembly and prepares and fits replacement pump into system.
4.4.	PERFORMS PIPING AND PIPELINE MAINTENANCE.
4.4.1.	PERFORMS RECURRING MAINTENANCE. Performs inspection, testing, pressure testing, hydrostatic pressure testing, bolt tightening, minor corrosion control (touch-up painting), and similar task.
4.4.2.	PERFORMS NONRECURRING MAINTENANCE. Troubleshoots to localize problem, prepares system for work, accomplishes maintenance, and tests as necessary.
4.5.	PERFORMS OTHER COMPONENT MAINTENANCE.
4.5.1.	PERFORMS RECURRING MAINTENANCE. Performs inspection, testing, adjusting, lubrication, bolt tightening, minor corrosion control (touch-up painting), and similar task.
4.5.1.1.	MAINTAINS HOSE ASSEMBLY.
4.5.1.2.	MAINTAINS FILTER-SEPARATOR.
4.5.1.3.	MAINTAINS METER.
4.5.1.4.	MAINTAINS PRESSURE GAUGE.
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4.5.1.5.	MAINTAINS TRUCK FILL STAND SWING JOINT.
4.5.1.6.	MAINTAINS TANK VENT (VACUUM PRESSURE VENT AND BELOW GROUND TANK VENT).
4.5.1.7.	MAINTAINS PANTAGRAPH ASSEMBLY USED IN HOT REFUELING SYSTEM.
4.5.1.8.	MAINTAINS SELF-CLEANING OR CENTRIFUGAL TYPE FILTER.
4.5.1.9.	MAINTAINS LPG VAPORIZER (AIRCRAFT AND STRUCTURAL FIRE SIMULATOR).
4.5.1.10.	MAINTAINS PROPANE SENSOR AND RELATED COMPONENT (AIRCRAFT AND STRUCTURAL FIRE SIMULATOR).
4.5.2.	PERFORMS NONRECURRING MAINTENANCE. Troubleshoots to localize problem, prepares system for work, accomplishes maintenance, and necessary testing.
4.5.2.1.	PERFORMS ON-SITE REPAIR.
4.5.2.2.	PERFORMS IN-SHOP REPAIR. Removes, repairs, and reinstalls component.
4.5.2.3.	REPLACES COMPONENT. Removes present component; prepares and fits replacement component into system.
4.6.	PERFORMS TRAVEL.
4.6.1.	PERFORMS TRAVEL ASSOCIATED WITH RECURRING MAINTENANCE.
4.6.2.	PERFORMS TRAVEL ASSOCIATED WITH NONRECURRING MAINTENANCE.
4.7.	PREPARES FOR UNIT TRAINING ASSEMBLY (UTA). Prepares training material to ensure military personnel will meet contingency requirements upon mobilization.
4.8.	PURCHASES USING GOVERNMENT PURCHASE CARD. Purchases filters, tools, hoses, etc., using Government Purchase Card.
4.8.1.	ENSURES FUNDS ARE AVAILABLE.
4.8.2.	PLACES ORDER AND ENSURES RECEIPT FROM VENDOR.
4.8.3.	TRAVELS TO PICK UP PURCHASE AT VENDOR IF NECESSARY.

4.8.4.	MAINTAINS GOVERNMENT PURCHASE CARD FOLDER.
4.9.	PREPARES FOR DEPLOYED UNIT TRAINING. Prepares necessary equipment, facilities, and areas for use by a deploying unit for their training purposes at the CRTC. Interacts with deployed personnel to ensure all training needs are met. Remains in standby status when requested for urgent repairs or guidance during visiting unit deployment to the CRTC.
5.	POWER PRODUCTION.
5.1.	MAINTAINS UNMANNED EMERGENCY ELECTRICAL DIESEL POWER GENERATING UNIT.
5.1.1.	INSTALLS UNIT. Installs diesel generator unit to be used as an emergency source of electrical power. Includes initial servicing and exercising unit to ensure correct operation. Covers initial installation of permanently installed unit only. Ensures generator is properly phased to load by use of phase sequence indicator.
5.1.2.	REMOVES UNIT. Removes diesel generator unit when no longer required as an emergency source of electrical power or when necessary for overhaul. Prepares unit for shipment to depot or contractor.
5.1.3.	REPLACES UNIT. Replaces or reinstalls diesel generator unit removed for overhaul. Services and exercises unit to ensure proper operation.
5.1.4.	PERFORMS PREVENTIVE MAINTENANCE.
5.1.4.1.	EXERCISES UNIT. Exercises emergency power diesel generating unit on a regularly scheduled basis. Inspects, adjusts, and performs minor repair and cleaning of unit. Completes required maintenance documentation.
5.1.4.2.	INSPECTS UNIT. Completes inspection of emergency power diesel generating system at weekly, quarterly, semiannual, and annual intervals as prescribed by appropriate technical order. Completes required maintenance documentation.
5.1.4.3.	TESTS OIL SAMPLE. Tests oil sample drawn during exercise of emergency power diesel generating system to ensure proper lubrication.
5.1.4.4.	CHANGES ENGINE OIL. Drains and replenishes oil and replaces oil filter based on hours of unit operation or presence of contaminants in diesel unit. Completes required maintenance documentation.
5.1.4.5.	REFUELS UNIT. Replenishes fuel in tank of unmanned emergency electrical power generating unit.
5.1.5.	PERFORMS UNSCHEDULED MAINTENANCE. Performs unscheduled maintenance on diesel generator unit. Estimates cost, troubleshoots, repairs,

	removes, and replaces component part of emergency power generating unit.
5.1.6.	INSTALLS AND REMOVES EQUIPMENT AUTHORIZATION INVENTORY DATE (EAID) UNIT.
5.1.6.1.	INSTALLS EAID UNIT. Installs EAID portable emergency power diesel generating unit to act as an emergency source of power. Transports unit to installation site, installs and connects unit, and ensures proper operation.
5.1.6.2.	REMOVES EAID UNIT. Removes EAID portable emergency power diesel generating unit when no longer required. Disconnects unit and transports to appropriate storage area.
5.1.7.	MAINTAINS BATTERY.
5.1.7.1.	ACTIVATES BATTERY. Activates new battery received from supply by adding electrolyte and connecting battery to charger.
5.1.7.2.	DEACTIVATES BATTERY. Deactivates battery for turn in by neutralizing and draining acid.
5.1.7.3.	SERVICES BATTERY. Maintains battery currently in use by cleaning, testing, adding electrolyte, and connecting battery to charger.
5.1.7.4.	MONITORS BATTERY CHARGER. Maintains surveillance over battery while connected to battery charger.
5.1.8.	TRAINS OPERATOR. Provides annual emergency generator training to using activity personnel and issues certificate of competency.
5.2.	MAINTAINS UNMANNED BASE 2 MEGAWATT DIESEL GENERATOR UNIT.
5.2.1.	PERFORMS PREVENTIVE MAINTENANCE.
5.2.1.1.	EXERCISES UNIT. Exercises emergency power diesel generating unit on a regularly scheduled basis. Inspects, adjusts, and performs minor repair and cleaning of unit. Completes required maintenance documentation.
5.2.1.2.	INSPECTS UNIT. Completes inspection of emergency power diesel generating system at weekly, quarterly, semiannual, and annual intervals as prescribed by appropriate technical order. Completes required maintenance documentation.
5.2.1.3.	TESTS OIL SAMPLE. Tests oil sample drawn during exercise of emergency power diesel generating system to ensure proper lubrication.

5.2.1.4.	CHANGES ENGINE OIL. Drains and replenishes oil and replaces oil filter based on hours of unit operation or presence of contaminants in diesel unit. Completes required maintenance documentation.
5.2.1.5.	REFUELS UNIT. Replenishes fuel in tank of unmanned emergency electrical power generating unit.
5.2.2.	PERFORMS UNSCHEDULED MAINTENANCE. Performs unscheduled maintenance on diesel generator unit. Estimates cost, troubleshoots, repairs, removes, and replaces component part of emergency power generating unit.
5.2.3.	PERFORMS GENERATOR MAINTENANCE OUTSIDE NORMAL DUTY HOURS. Travels to CRTC, performs required maintenance, and returns to quarters.
5.3.	MAINTAINS THREAT EMITTER GENERATING UNIT.
5.3.1.	INSTALLS UNIT. Installs threat emitter generator unit. Includes initial servicing and exercising unit to ensure correct operation. Covers initial installation of permanently installed unit only. Ensures generator is properly phased to load by use of phase sequence indicator.
5.3.2.	REMOVES UNIT. Removes threat emitter generator unit when no longer required or when necessary for overhaul. Prepares unit for shipment to depot or contractor.
5.3.3.	REPLACES UNIT. Replaces or reinstalls threat emitter generator unit removed for overhaul. Services/exercises unit to ensure proper operation.
5.3.4.	PERFORMS PREVENTIVE MAINTENANCE.
5.3.4.1.	EXERCISES UNIT. Exercises threat emitter generating unit on a regularly scheduled basis. Inspects, adjusts, and performs minor repair and cleaning of unit. Completes required maintenance documentation.
5.3.4.2.	INSPECTS UNIT. Completes inspection of threat emitter generating system at weekly, quarterly, semiannual, and annual intervals as prescribed by appropriate technical order. Completes required maintenance documentation.
5.3.4.3.	TESTS OIL SAMPLE. Tests oil sample drawn during exercise of threat emitter generating system to ensure proper lubrication.
5.3.4.4.	CHANGES ENGINE OIL. Drains and replenishes oil and replaces oil filter based on hours of unit operation or presence of contaminants in diesel unit. Completes required maintenance documentation.
5.3.4.5.	REFUELS UNIT.
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5.3.5.	PERFORMS UNSCHEDULED MAINTENANCE. Performs unscheduled maintenance on threat emitter generator unit. Estimates cost, troubleshoots, repairs, removes, and replaces component part of unit.
5.3.6.	INSTALLS AND REMOVES EQUIPMENT AUTHORIZATION INVENTORY DATE (EAID) UNIT.
5.3.6.1.	INSTALLS EAID UNIT. Installs EAID threat emitter generating unit. Transports unit to installation site, installs and connects unit, and ensures proper operation.
5.3.6.2.	REMOVES EAID UNIT. Removes EAID threat emitter generating unit when no longer required. Disconnects unit and transports to appropriate storage area.
5.3.7.	MAINTAINS BATTERY.
5.3.7.1.	ACTIVATES BATTERY. Activates new battery received from supply by adding electrolyte and connecting battery to charger.
5.3.7.2.	DEACTIVATES BATTERY. Deactivates battery for turn in by neutralizing and draining acid.
5.3.7.3.	SERVICES BATTERY. Maintains battery currently in use by cleaning, testing, adding electrolyte, and connecting battery to charger.
5.3.7.4.	MONITORS BATTERY CHARGER. Maintains surveillance over battery while connected to battery charger.
5.3.8.	TRAINS OPERATOR. Provides annual threat emitter generator training to using activity personnel and issues certificate of competency.
5.4.	MAINTAINS UNMANNED EMERGENCY ELECTRICAL GASOLINE POWER GENERATING UNIT.
5.4.1.	INSTALLS UNIT. Installs gasoline generator unit to be used as an emergency source of electrical power. Includes initial servicing and exercising unit to ensure correct operation. Covers initial installation of permanently installed unit only. Ensures generator is properly phased to load by use of phase sequence indicator.
5.4.2.	REMOVES UNIT. Removes gasoline generator unit when no longer required as an emergency source of electrical power or when necessary for overhaul. Prepares unit for shipment to depot or contractor.
5.4.3.	REPLACES UNIT. Replaces or reinstalls gasoline generator unit removed for overhaul. Services/exercises unit to ensure proper operation.
5.4.4.	PERFORMS PREVENTIVE MAINTENANCE.
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5.4.4.1.	EXERCISES UNIT. Exercises emergency power gasoline generating unit on a regularly scheduled basis. Inspects, adjusts, and performs minor repair and cleaning of unit. Completes required maintenance documentation.
5.4.4.2.	INSPECTS UNIT. Completes inspection of emergency power gasoline generating system at semimonthly, semiannual, and annual intervals as prescribed by applicable technical order. Completes required maintenance documentation.
5.4.4.3.	TESTS OIL SAMPLE. Tests oil sample drawn during exercise of emergency power gasoline generating system to ensure proper lubrication.
5.4.4.4.	CHANGES ENGINE OIL. Drains and replenishes oil and replaces oil filter based on hours of unit operation or presence of contaminants in gasoline unit. Completes required maintenance documentation.
5.4.4.5.	REFUELS UNIT. Replenishes fuel in tank of unmanned emergency electrical power generating unit.
5.4.5.	PERFORMS UNSCHEDULED MAINTENANCE. Performs unscheduled maintenance on gasoline generator unit. Estimates cost, troubleshoots, repairs, removes, and replaces component part of emergency power generating system. Completes required maintenance documentation.
5.4.6.	INSTALLS AND REMOVES EAID UNIT.
5.4.6.1.	INSTALLS EAID UNIT. Installs EAID portable gasoline emergency power generating unit to act as an emergency source of power. Transports unit to installation site, installs and connects unit, and ensures proper operation.
5.4.6.2.	REMOVES EAID UNIT. Removes EAID portable emergency power gasoline generating unit when no longer required. Disconnects and transports unit to appropriate storage area.
5.4.7.	MAINTAINS BATTERY.
5.4.7.1.	ACTIVATES BATTERY. Activates new battery received from supply by adding electrolyte and connecting battery to charger.
5.4.7.2.	DEACTIVATES BATTERY. Deactivates battery for turn-in by neutralizing and draining acid.
5.4.7.3.	SERVICES BATTERY. Maintains battery currently in use by cleaning, testing, adding electrolyte, and connecting battery to charger.
5.4.7.4.	MONITORS BATTERY CHARGER. Maintains surveillance over battery while connected to battery charger.
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5.4.8.	TRAINS OPERATOR. Provides emergency generator operator training to using activity personnel and issues certificate of competency.
5.5.	MAINTAINS AUTOMATIC TRANSFER PANEL.
5.5.1.	INSTALLS UNIT. Installs automatic transfer panel used to transfer an electrical load from a failed primary source to an emergency source of power. Includes initial installation and servicing as well as exercising unit to ensure correct operation.
5.5.2.	ESTIMATES MAN-HOURS, MATERIALS, AND EQUIPMENT.
5.5.3.	REMOVES UNIT. Removes automatic transfer panel when no longer required and prepares for shipment to depot or manufacturer.
5.5.4.	REPLACES UNIT. Replaces or reinstalls automatic transfer panel removed for overhaul. Services/exercises unit to ensure proper operation.
5.5.5.	PERFORMS PREVENTIVE MAINTENANCE.
5.5.5.1.	EXERCISES UNIT. Exercises automatic transfer panel on a regularly scheduled basis. Inspects, adjusts, and performs minor repair and cleaning of unit. Completes required maintenance documentation.
5.5.5.2.	INSPECTS UNIT. Completes inspection of automatic transfer panel at semimonthly, semiannual, and annual intervals as prescribed by applicable technical order. Completes required maintenance documentation.
5.5.6.	PERFORMS UNSCHEDULED MAINTENANCE. Performs unscheduled maintenance on automatic transfer panel. Estimates cost, troubleshoots, repairs, removes, and replaces component part in unit. Completes required maintenance documentation.
5.6.	PERFORMS WATER SYSTEM ENGINE MAINTENANCE.
5.6.1.	INSTALLS ENGINE. Installs diesel, gasoline, or natural gas water system engine.
5.6.2.	PERFORMS PREVENTIVE MAINTENANCE.
5.6.2.1.	EXERCISES UNIT. Exercises engine on a regularly scheduled basis. Inspects, adjusts, and performs minor repair and cleaning of unit. Completes required maintenance documentation.
5.6.2.2.	TESTS OIL SAMPLE. Tests oil sample drawn during exercise of engine to ensure proper lubrication.

5.6.2.3.	CHANGES ENGINE OIL. Drains and replenishes oil and replaces oil filter based on hours of unit operation or presence of contaminants. Completes required maintenance documentation.
5.6.3.	PERFORMS UNSCHEDULED MAINTENANCE. Performs unscheduled maintenance on diesel, gasoline, or natural gas water system engine. Estimates cost, troubleshoots, repairs, removes, and replaces component part of engine. Completes required maintenance documentation.
5.6.4.	TRAINS OPERATOR. Provides emergency engine operator training to using activity personnel and issues certificate of competency.
5.7.	MAINTAINS NATURAL GAS GENERATING SYSTEM.
5.7.1.	INSTALLS UNIT. Transports unit to installation site, installs and connects unit, and ensures proper operation.
5.7.2.	REMOVES UNIT. Disconnects and transports unit to appropriate storage area.
5.7.3.	REPLACES UNIT. Replaces or reinstalls. Services/exercises unit to ensure proper operation.
5.7.4.	INSPECTS UNIT. Completes inspection of system at appropriate interval as prescribed by applicable technical order. Completes required maintenance documentation.
5.7.5.	TESTS UNIT.
5.7.6.	PERFORMS PREVENTIVE MAINTENANCE ON SYSTEM.
5.7.7.	PERFORMS UNSCHEDULED MAINTENANCE. Performs unscheduled maintenance on system. Estimates cost, troubleshoots, repairs, removes, and replaces component part of system. Completes required maintenance documentation.
5.8.	MAINTAINS LIQUID PROPANE GENERATING SYSTEM.
5.8.1.	INSTALLS UNIT. Transports unit to installation site, installs and connects unit, and ensures proper operation.
5.8.2.	REMOVES UNIT. Disconnects and transports unit to appropriate storage area.
5.8.3.	REPLACES UNIT. Replaces or reinstalls. Services/exercises unit to ensure proper operation.
5.8.4.	INSPECTS UNIT. Completes inspection of system at appropriate interval as prescribed by applicable technical order. Completes required maintenance

	documentation.
5.8.5.	TESTS UNIT.
5.8.6.	PERFORMS PREVENTIVE MAINTENANCE ON SYSTEM.
5.8.7.	PERFORMS UNSCHEDULED MAINTENANCE. Performs unscheduled maintenance on system. Estimates cost, troubleshoots, repairs, removes, and replaces component part of system. Completes required maintenance documentation.
5.9.	MAINTAINS BARRIER ARRESTING KIT (BAK-12) AIRCRAFT ARRESTING SYSTEM.
5.9.1.	PERFORMS PERIODIC INSPECTION. Performs periodic inspection in accordance with applicable technical order to ensure the operational capability of the BAK-12 aircraft arresting system. Completes required maintenance documentation associated with inspection and coordinates barrier commission status with appropriate agency.
5.9.1.1.	PERFORMS DAILY INSPECTION.
5.9.1.2.	PERFORMS WEEKLY INSPECTION.
5.9.1.3.	PERFORMS MONTHLY INSPECTION.
5.9.2.	PERFORMS PREVENTIVE/RECURRING MAINTENANCE.
5.9.2.1.	REPLACES CABLE. Replaces runway pendant cable IAW applicable Technical Order (TO). Notifies all required agencies of time cable barrier will be out of service.
5.9.2.2.	REPLACES TAPE. Replaces purchase tape IAW applicable TO. Notifies all required agencies of time cable barrier will be out of service.
5.9.2.3.	TURNS TAPE. Turns purchase tape end-for-end after 24-months service.
5.9.2.4.	CROPS TAPE. Crops length of tape between runway edge sheave and tape connector IAW applicable TO.
5.9.2.5.	SYNCHRONIZES UNIT. Synchronizes unit and proof tests hydraulic system at 3-month interval and IAW applicable TO.
5.9.2.6.	SERVICES REWIND ENGINE. Services engine at three-month interval.
5.9.2.7.	REPACKS SHEAVE. Disassembles sheave and packs bearing IAW with applicable TO.

5.9.3.	PERFORMS UNSCHEDULED MAINTENANCE. Performs any required unscheduled maintenance. Includes Time Compliance Technical Order (TCTO). Notifies all required agencies of time barrier will be out of service. Provides required cost estimates of repair parts and equipment to Work Control.
5.9.4.	PERFORMS MAJOR MAINTENANCE. Performs major maintenance on arresting gear to include disassembly, inspection, overhaul, lubrication, and reassembly. Includes brake change and major overhaul. Notifies all required agencies of time barrier will be out of service. Provides required cost estimates of repair parts and equipment to Work Control.
5.9.5.	OPERATES AIRCRAFT ARRESTING SYSTEM (POST-ENGAGEMENT).
5.9.5.1.	INSPECTS SYSTEM FOR SECURITY AND LEAK.
5.9.5.2.	INSPECTS TAPE SHEAVE, TAPE, AND CABLE.
5.9.5.3.	CHECKS FLUID LEVEL.
5.9.5.4.	OPERATES REWIND TO RETRACT TAPE AND PRETENSION PENDANT.
5.9.5.5.	BLEEDS HYDRAULIC SYSTEM.
5.9.5.6.	COMPLETES MAINTENANCE DOCUMENTATION.
5.9.5.7.	COORDINATES BARRIER COMMISSION STATUS WITH APPROPRIATE AGENCY.
5.9.6.	ACTIVATES OR DEACTIVATES ARRESTING SYSTEM. Activates or deactivates arresting system to accommodate wind directional change. Removes snow or ice from the vicinity of runway edge sheave and entrance to facility housing aircraft arresting system. Coordinates with appropriate agency concerning barrier commission status.
5.9.7.	PROVIDES TRAINING. Provides semiannual training to ensure Fire Department capability to accomplish system activation or deactivation reset following engagement and inspection action. Issues certificate of competency.
5.9.8.	REMOVES CABLES DURING SNOWPLOWING AND DEICING.
5.10.	MAINTAINS BAK-12/14 PORTION OF AIRCRAFT ARRESTING SYSTEM.
5.10.1.	PERFORMS PERIODIC INSPECTION. Performs periodic inspection in accordance with applicable technical order to ensure the operational capability of the hook cable support system.
5.10.1.1.	PERFORMS DAILY INSPECTION.
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5.10.1.2.	PERFORMS MONTHLY INSPECTION.
5.10.2.	PERFORMS PREVENTIVE/RECURRING MAINTENANCE. Cleans support box with dry cleaning solvent, vacuums, and lubricates box. Sweeps through section and cleans as necessary. Cleans, repairs, and paints rusted surface in accordance with applicable directive.
5.10.3.	OPERATES HOOK CABLE SUPPORT SYSTEM (POST-ENGAGEMENT).
5.10.3.1.	INSPECTS SUPPORT BLOCK FOR CONDITION.
5.10.3.2.	OBSERVES OPERATION OF SYSTEM. Observes operation of system in the up/down modes by use of the runway edge box control and tower control.
5.10.4.	PROVIDES TRAINING. Provides training to Fire Department personnel in BAK-12/14 system activation or deactivation reset procedures following engagement and inspection action. Issues certificate of competency.
5.10.5.	PROVIDES BAK-14 SIMULATOR TRAINING TO DEPLOYED UNIT.
5.11.	MAINTAINS MOBILE AIRCRAFT ARRESTING SYSTEM (MAAS).
5.11.1.	TRANSPORTS/INSTALLS MAAS. Loads MAAS for transport on flat bed tractor-trailer or aircraft, off loads, prepares site for installation, and installs unit.
5.11.2.	PERFORMS PERIODIC INSPECTION. Performs periodic inspection in accordance with applicable technical order to ensure the operational capability of the MAAS system. Completes required maintenance documentation associated with inspection and coordinates barrier commission status with appropriate agency.
5.11.2.1.	PERFORMS DAILY INSPECTION.
5.11.2.2.	PERFORMS WEEKLY INSPECTION.
5.11.2.3.	CERTIFIES SYSTEM WITH AIRCRAFT.
5.11.3.	PERFORMS PREVENTIVE RECURRING MAINTENANCE.
5.11.3.1.	REPLACES CABLE. Replaces runway pendant cable after 36-months service.
5.11.3.2.	REPLACES TAPE. Replaces purchase tape after 48-months service.
5.11.3.3.	TURNS TAPE. Turns purchase tape end-for-end after 24-months service.
5.11.3.4.	CROPS TAPE. Crops length of tape between runway edge sheave and tape connector at six-month interval.

5.11.3.5.	SYNCHRONIZES UNIT. Synchronizes unit and proof tests hydraulic system at three-month interval.
5.11.3.6.	SERVICES REWIND ENGINE. Services engine at three-month interval, to include oil and filter change, and required lubrication.
5.11.3.7.	PERFORMS UNSCHEDULED MAINTENANCE. Includes TCTO.
5.11.3.8.	PERFORMS MAJOR MAINTENANCE. Performs major maintenance on arresting gear to include disassembly, inspection, overhaul, lubrication, and reassembly. Includes brake change and major overhaul.
5.11.3.9.	OPERATES AIRCRAFT ARRESTING SYSTEM (POST-ENGAGEMENT). Inspects system for security and leak. Inspects tape sheave, tape, and cable. Checks fluid level. Operates rewind to retract tape and pretension pendant. Bleeds hydraulic system. Completes maintenance documentation. Coordinates barrier commission status with appropriate agency.
5.11.3.10.	ACTIVATES OR DEACTIVATES ARRESTING SYSTEM. Activates or deactivates arresting system to accommodate wind directional change. Removes snow or ice from the vicinity of runway edge sheave and entrance to facility housing aircraft arresting system. Coordinates with appropriate agency concerning barrier commission status.
5.12.	PROVIDES VISITING UNIT SUPPORT.
5.12.1.	TRAINS VISITING UNIT FIRE DEPARTMENT. Trains visiting unit on purpose, operation, retraction, and post-engagement inspection of BAK-12 and MAAS systems for mobility requirements.
5.12.2.	TRAINS VISITING UNIT POWER PRODUCTION PERSONNEL ON MOBILITY GENERATOR SET. Trains personnel on operation, installation, and inspection of mobile generator sets for mobility requirements.
5.12.3.	TRAINS VISITING UNIT POWER PRODUCTION PERSONNEL ON BAK- 12/MAAS. Trains personnel on purpose, installation, pre-engagement inspection, operation, retraction, and post-engagement inspection of mobility requirements.
5.13.	PERFORMS TRAVEL. Performs travel associated with inspection of the job site, travels to job site and returns or travels from job site to job site.
5.14.	PREPARES FOR UTA. Prepares training material to ensure military personnel will meet contingency requirements upon mobilization.
5.15.	MAINTAINS TECHNICAL ORDER DISTRIBUTION SUBACCOUNT. Maintains TO subaccount for BAK-12/14 and generators maintained.

5.15.1.	PERFORMS ANNUAL REVIEW. Performs annual review in designated month using on-line index system. Uses on-line index to verify latest changes and date of TOs in library. Ensures all publications are up-to-date.
5.15.2.	MAINTAINS TO LIBRARY. Maintains TO library IAW applicable TOs.
5.15.2.1.	MAINTAINS CHANGE/SUPPLEMENT. Ensures all changes, messages, and supplements are posted.
5.15.2.2.	PERFORMS LIST OF EFFECTED PAGES (LEP). Performs a LEP, ensuring all pages are contained in change received, prior to posting change.
5.15.3.	PERFORMS ANNUAL INDEX. Performs annual index, ensuring TOs have all changes, supplements and messages posted. Ensures TO has all pages.
5.15.4.	REQUESTS TO. Requests TO supplements, changes and basic if required.
5.15.5.	PERFORMS MONTHLY REVIEW OF AF TO CATALOG. Reviews the AF TO Catalog monthly for changes to electronically downloaded TOs and updates library.
5.16.	OPERATES EQUIPMENT. Operates various types of equipment, to include backhoes and dump trucks, to meet Civil Engineering mission requirements.
6.	PRODUCTION CONTROL.
6.1.	PROCESSES WORK AUTHORIZATION DOCUMENTATION.
6.1.1.	PROCESSES BCE WORK REQUEST.
6.1.1.1	REVIEWS WORK REQUEST. Verifies the work is a BCE responsibility; reviews the request for completeness, adequacy of justification, and description; determines if the work or service requested is in any existing programs; determines if funds are available and coordinates with requester as required.
6.1.1.2.	REJECTS WORK REQUEST. Rejects a request that is not a BCE responsibility, is improperly documented, is not adequately justified or described, or is already in an existing program. Makes appropriate entries on form letter, attaches all copies of work request to the form letter, and forwards it to the originator. Annotates Work Register.
6.1.1.3.	ACCEPTS WORK REQUEST. Assigns a control number from the Work Request and Order Register to the work request; determines required review office with the BCE organization, recommends method of accomplishment, establishes suspense dates for review, and annotates the Work Register accordingly. Forwards the request to the reviewing agency and follows up on suspense established.

6.1.1.4.	PRESENTS WORK REQUEST TO APPROPRIATE INDIVIDUAL OR ACTIVITY FOR APPROVAL OR DISAPPROVAL. Prepares summary of staff recommendation, obtains clarification on work requirement, and presents work request for approval or disapproval.
6.1.1.5.	PROCESSES APPROVED WORK REQUEST. Provides written notification to originator, updates Work Request Register, and forwards request to appropriate work center.
6.1.2.	PROCESSES BCE REAL PROPERTY MAINTENANCE REQUEST.
6.1.2.1.	REVIEWS REAL PROPERTY MAINTENANCE REQUEST. Verifies each listed open item of work or service is BCE responsibility, is not in an existing program, and is submitted on the proper document.
6.1.2.2.	DISAPPROVES REAL PROPERTY MAINTENANCE REQUEST. Disapproves each listed item of open work or service requested if in an existing program or if it is not submitted on the proper document. Annotates AF IMT 332 with reason for disapproval and returns to requester.
6.1.2.3.	APPROVES REAL PROPERTY MAINTENANCE REQUEST. Obtains approval for each listed item of open work or service requested that is a BCE responsibility, is not already in an existing program, and is submitted on the proper document. Determines if the requested work or service is to be accomplished by work order, if the requested work or service is to be accomplished by in-service or by contract, and annotates the Real Property Maintenance Request with the action taken on each listed item of approved work or service.
6.1.3.	PROCESSES AF IMT 332/NGB 327, CIVIL ENGINEER WORK ORDER.
6.1.3.1.	PREPARES DRAFT BCE IN-SERVICE AF IMT 332/NGB 327. Prepares draft, records on the work order register and work order folder, enters the work order control data and work description into Integrated Engineering Management Systems (IEMS)/Automated Civil Engineering System (ACES), prepares the work order strip, places it on the appropriate status chart, and forwards the work order folder to appropriate work center.
6.1.3.2.	COMPLETES PROCESSING OF IN-SERVICE WORK ORDER. Updates IEMS/ACES file, forwards work order folder to the BCE for signature, programs the work order, and forwards to Logistics when necessary.
6.1.3.3.	COORDINATES WITH LOGISTICS. Coordinates with CE Logistics to obtain or change status of materials for emergency, priority, or high interest work order.
6.1.3.4.	RELEASES AF IMT 332/NGB 327. Releases in-service work order folder to appropriate CE work center after assuring folder contains all required

	documentation.
6.1.3.5.	DETERMINES CHANGE ORDER REQUIREMENT. Reviews IEMS/ACES product reflecting current status and cost of work order being accomplished to determine when change orders are required, obtains approval, and coordinates with shop supervisor concerned.
6.1.3.6.	CLOSES IN-SERVICE AF IMT 332/NGB 327. Reviews completed work order folder; closes computer Work Order Master Record; and files completed work order folder. Forwards work order folder to Real Property for appropriate action.
6.1.4.	PROCESSES CANCELLED AF IMT 332/NGB 327. Locates and obtains all copies of BCE work order for a cancelled work order. Documents cancellation action. Writes cancelled on the original of the AF IMT 332/NGB 327, annotates in the Work Order Register the work is cancelled, updates the IEMS/ACES file, annotates the reason for cancellation on the AF IMT 332/NGB 327, notifies the requester, files the work order folder with other cancelled work orders, and ensures allocated materials are returned.
6.1.5.	PROCESSES WORK ORDER.
6.1.5.1.	PREPARES BCE WORK ORDER RECORD. Determines which job requirements are to be included on a work order and the accomplishment technique; i.e., emergency, urgent, or routine. Assigns a work order number from the Work Order Log, assigns a collection work order number to each work order, and forwards to appropriate work center.
6.1.5.2.	REVIEWS BCE WORK ORDER RECORD. Verifies the estimated date of accomplishment, annotates estimated completion date on the work order, obtains the authorizing signature, assigns the required delivery date for materials, forwards to CE Logistics if materials are required, and updates the Work Order Log.
6.1.5.3.	RELEASES WORK ORDER RECORD. Reviews to ensure materials required are available, releases work order to appropriate work center for job accomplishment, notifies customer of any change or delay in the job accomplishment, and updates the Work Order Log.
6.1.5.4.	CLOSES WORK ORDER RECORD. Updates the Work Order Log; determines material costs, contract costs and labor hours, and files hard copy of work order record in work order file.
6.1.6.	PROVIDES CUSTOMER SERVICE.
6.1.6.1.	ASSISTS CUSTOMER IN WORK REQUEST PREPARATION. Assists customer in the preparation of written request for work.
6.1.6.2.	PROVIDES CUSTOMER WITH WORK STATUS. Provides customer with

	information relative to status of any work requested of the BCE.
6.1.7.	PREPARES LISTING OF DELINQUENT WORK ORDER. Prepares weekly and monthly list of delinquent work orders.
6.1.8.	MAINTAINS FACILITY JACKET.
6.1.8.1.	PREPARES FOLDER FOR NEW FACILITY. Prepares a facility jacket folder for new facility, files the Disposal Plans in each folder, a copy of the BCE Work Order showing work performed against the facility, and Military Construction Project Data. Files folder by facility number.
6.1.8.2.	PURGES FOLDER. Reviews folder to update and removes extraneous material, and removes facility jacket folder from file when the facility is removed from the base inventory.
6.1.8.3.	MAINTAINS WORK REQUEST SUSPENSE FILE. Files a work request waiting approval or disapproval action or approved but not yet assigned a work order or work order number.
6.1.8.4.	MAINTAINS WORK ORDER FILE. Files work order in appropriate file and destroys as necessary.
6.1.8.5.	MAINTAINS WARRANTY AND GUARANTEE DOCUMENT FILE. Files copies of warranty and guarantee documents in production control, and destroys documents when warranty and guarantee expire or are voided.
6.2.	PERFORMS SCHEDULING.
6.2.1.	DEVELOPS WEEKLY WORK SCHEDULE.
6.2.1.1.	REVIEWS WORK DOCUMENT TO ENSURE COMPLETENESS. Reviews work order to ensure all required documents, such as BCE work clearance request, are included and completes necessary coordination as required.
6.2.1.2.	PREPARES BCE WEEKLY SCHEDULE. Reviews work requirement, selects work order and work order to be scheduled, and coordinates with base agencies such as Fire Department, Safety, and Communications. Conducts weekly scheduling meeting with appropriate personnel to determine work orders and work orders that can be accomplished within the following week. Meets with shop supervisor to solve any scheduling problems not solved during the scheduling meeting. Prepares the weekly BCE schedule for each operations cost center and distributes to appropriate cost center.
6.2.2.	ENTERS LABOR ESTIMATE INTO IEMS/ACES. Enters the labor estimate for the weekly schedule report into IEMS/ACES based on the Labor Utilization Code (LUC) entries on the weekly schedule.

6.2.3.	UPDATES IEMS/ACES. Enters work order completion date in appropriate IEMS/ACES shop record and makes changes as required.
6.2.4.	REVIEWS COMPUTER PRODUCT. Reviews computer product for information and action.
6.2.5.	MONITORS BCE WORK STOPPAGE REPORT. Reviews Work Stoppage Report to determine reason for work stoppage and makes correction if required.
6.3.	MANAGES SERVICE CALL PROGRAM.
6.3.1.	RECEIVES VERBAL REQUEST AND DETERMINES COURSE OF ACTION. Receives verbal request from building custodian, inspector, BCE personnel, and others. Determines if the work described is the responsibility of the BCE. Classifies the work as emergency, urgent, or routine, and enters request on the BCE Work Order Log. Annotates Work Order Record indicating classification of work, control number, and description of work required.
6.3.2.	ASSIGNS JOB TO APPROPRIATE BCE COST CENTER. Dispatches worker and notifies customer of estimated arrival time.
6.3.3.	ANNOTATES APPROPRIATE RECORD UPON COMPLETION OF WORK. Enters name of craftsman, date, job completion time, and initials of the service call specialist, ensuring the control number is closed out when work is completed.
6.3.4.	PREPARES LISTING OF EMERGENCY/URGENT WORK NOT DONE. Reviews Work Order Log each day and prepares a list of emergency work not accomplished within 48 hours and a list of urgent work not accomplished within five workdays.
6.3.5.	RECORDS LABOR DATA. Records labor data for each worker and provides worker's man-hours by Collection Work Order Number (CWON) and LUC for posting. Inputs labor figures into IEMS/ACES.
6.4.	MANAGES RECURRING MAINTENANCE PROGRAM.
6.4.1.	PROCESSES MASTER RECURRING MAINTENANCE PROGRAM (RMP) SHEET. Pre-edits and adds necessary control data required for add, change, and delete transaction and inputs into IEMS/ACES.
6.4.2.	RECEIVES AND PROCESSES RMP COMPLETION CARD. Receives completion card, checks card against Part 1 of the RMP to ensure the schedule is marked appropriately, and delivers card to the shop. Collects completed Recurring Maintenance Completion (CWK) cards, reviews for completeness, and inputs into IEMS/ACES.
6.4.3.	RECEIVES AND PROCESSES RECURRING MAINTENANCE SCHEDULE.

	Receives and separates parts 1 and 2 and delivers to appropriate shop.					
6.4.4.	PROVIDES TECHNICAL ASSISTANCE TO SHOP SUPERVISOR ON ALL PHASES OF THE RMP. Provides the shop supervisor with all information needed to keep the RMP viable and updates RMP file when changes are made to the program.  EVALUATES TOTAL RMP. Uses IEMS/ACES automated products dealing with the RMP to evaluate and correct any visible problem the shop may have and assists them when necessary. Loads RMP data into the IEMS/ACES file.					
6.4.5.						
6.4.6.	PERFORMS RMP UPDATE FROM DATA PROVIDED BY SHOP SUPERVISOR. Receives change and annotates appropriate record.					
6.4.7.	MAINTAINS MASTER COPY OF MAINTENANCE ACTION SHEET (MAS Maintains a master copy of all shop maintenance action sheets for audit purposes					
6.5.	MANAGES WARRANTY AND GUARANTEE PROGRAM.					
6.5.1.	CONDUCTS WARRANTY AND GUARANTEE EVALUATION MEETING. Conducts meeting with Base Supply and Contracting activities, when needed, to determine if warranty and guarantee provisions are practical and economical to enforce; documents the decision; and sends form letter to the Contracting Office.					
6.5.2.	MAINTAINS MANUAL OR AUTOMATED LIST OF ITEMS UNDER WARRANTY AND GUARANTEE.					
6.5.2.1.	REVIEWS THE WARRANTY AND GUARANTEE LIST QUARTERLY. Reviews the list for expiration date of warranty and guarantee, annotates review date on the list, removes item no longer under warranty and guarantee. Notifies appropriate personnel of any item removed and updates all copies of warranty and guarantee list.					
6.5.2.2.	ADDS NEW ITEM TO THE WARRANTY AND GUARANTEE LIST. Removes all warranty and guarantee documents from completed work order fol and maintains in a suspense file. Verifies item cannot be listed in the RMP and adds it to the list. Notifies appropriate personnel of any item added to the list a updates all copies of the warranty and guarantee list.					
6.6.	MANAGES SELF-HELP PROGRAM.					
6.6.1.	REVIEWS SELF-HELP REQUEST. Reviews request to determine if the work is a BCE responsibility; if request is within the BCE approval authority; if work can be done by the requester; if an AF IMT 103, BCE Work Clearance Request, is required; if the requester is proposing the use of donated or CE resource; and if BCE resources are available.					

6.6.2.	DISAPPROVES REQUEST. Disapproves request and returns to requester with explanation.						
6.6.3.	APPROVES REQUEST. Makes appropriate entries on the work request, signs request, distributes request to appropriate office, gives a copy to the requester, and assures requester is provided all details regarding safety and reporting requirements.						
6.6.4.	ARRANGES FOR FINAL INSPECTION OF PROJECT. Notifies shop supervisor of date for final inspection of the work.						
6.6.5.	ENTERS COST INTO IEMS/ACES AS REQUIRED.						
7.	CIVIL ENGINEERING LOGISTICS. Manages the Civil Engineering material control activity to include operations, storage and distribution, inventory, stock control, and equipment. Assigns work and establishes work priority. Schedules State employees performing material control function. Oversees work in progress to ensure compliance with directive, quality standard, time, safety, and security regulation. Ensures supply discipline and care of equipment and facility. Gives verbal instruction to subordinates.						
8.	INDIRECT. Indirect work involves those tasks that are not readily identifiable with the work center's specific product or service. The major categories of standard indirect work are: Administers Civilian, Officer, and Enlisted Personnel; Directs Work Center Activity; Provides Administrative Support; Prepares for and Conducts/Attends Meeting; Administers Training; Manages Supplies; Maintains Equipment; and Performs Cleanup.						

## **Attachment 3**

## MANPOWER TABLE

Table A3.1. Standard Manpower Table.

Air Force Specialty Title 4710TC	AFSC	Grade	Manpower Requirement					
Civ Eng – Env Eng	032EXJ	AGR	0	0	1	1		
Operations Mgt Supt	3E691	AGR	1	1	1	1		
Supply Management Crft	2S0X1	AGR	1	1	1	1		
Electric Power Production Crft	3E0X2	AGR	2	2	2	2		
Engineering Crft	3E5X1	AGR	1	1	1	1		
Ops Management Crft	3E6X1	AGR	0	1	1	2		
Liq Fuels Maint Sys Crft	3E4X2	AGR	1	1	1	1		
Total			6	7	8	9		

**NOTE**. AFSCs may be adjusted at the discretion of the Commander.